# A STUDY OF INTERRELATIONSHIP OF TEACHING STYLES, LEARNING STYLES AND STUDENTS' ACHIEVEMENT MOTIVATION AT SECONDARY LEVEL

By

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## NATIONAL UNIVERSITY OF MODERN LANGUAGES ISLAMABAD

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**Thesis/ Dissertation Title:** <u>A Study of Interrelationship of Teaching Styles, Learning</u> Styles and Students' Achievement Motivation at secondary level in District Rawalpindi

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#### ABSTRACT

### Thesis Title: A Study of Interrelationship of Teaching Styles, Learning Styles and Students' Achievement Motivation at Secondary Level in District Rawalpindi.

This study was undertaken to assess different teaching styles as perceived by the students, learning styles and achievement motivation of students at secondary school level and to examine the interrelationship of teaching styles, learning styles and students' achievement motivation at secondary school level. Population of the study consisted of total 5212 students of public sectors schools located in Tehsil Rawalpindi. Random sampling technique was used. 521students were selected as sample of the study. The study was descriptive in nature. Data were collected through three questionnaires. Questionnaire regarding teaching style was based on theory of Anthony Grasha (1996, learning styles on theory of Fleming's (2001) VAK model and achievement motivation theory by McInerney (1997). These instruments have reliability0.79, 0.67 and 0.88 respectively. Data were analyzed by using percentages, mean scores and mediation analysis (Regression). Major conclusions of the study were; formal authority teaching style is the most preferred teaching style as perceived by the students. Visual and auditory learning styles are most prevailing learning styles of the students. It was also concluded that students were highly motivated in their mastery goals. Furthermore, it was concluded that there was significant positive relationship between teaching styles, learning styles students' achievement motivation at secondary school level. This correlation is statistically significant. On the basis of conclusions, it is highly recommended that training may give to the teachers about teaching styles which carry the advantages of teaching styles as formal authority, expert, facilitator delegator, and personal model and it may be free from the drawbacks of these styles. Moreover, it is obligation of teachers to motivate students by fulfilling their social, mastery and performance goals by using all their senses such as visual, auditory and kinesthetic.

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## LIST OF ABBREVIATIONS

AC	Abstract Conceptualization
AE	Active Experimentation
AR	Abstract Random
AS	Abstract Sequential
CE	Concrete Experience
CR	Concrete Random
E	Extroversion
EFL	English as Foreign Language
Ι	Intro version
Ι	Intuition
LS	Learning Styles
MBTI	Myer-Briggs Type Indicator
MI	Multiple Intelligence
MIT	Multiple Intelligence Theory
n -ach	Need Achievement
n -ach NFs	Need Achievement Intuitive feeler
NFs	Intuitive feeler
NFs NTs	Intuitive feeler Intuitive thinker
NFs NTs RO	Intuitive feeler Intuitive thinker Reflective Observation
NFs NTs RO S	Intuitive feeler Intuitive thinker Reflective Observation Sensing
NFs NTs RO S SF	Intuitive feeler Intuitive thinker Reflective Observation Sensing Sensor-feeler
NFs NTs RO S SF SJs	Intuitive feeler Intuitive thinker Reflective Observation Sensing Sensor-feeler Sensing judger
NFs NTs RO S SF SJs SPs	Intuitive feeler Intuitive thinker Reflective Observation Sensing Sensor-feeler Sensing judger Sensing perceiver
NFs NTs RO S SF SJs SPs ST	Intuitive feeler Intuitive thinker Reflective Observation Sensing Sensor-feeler Sensing judger Sensing perceiver Sensor-thinker
NFs NTs RO S SF SJs SPs ST TAT	Intuitive feeler Intuitive thinker Reflective Observation Sensing Sensor-feeler Sensing judger Sensing perceiver Sensor-thinker Thematic Apperception Test
NFs NTs RO S SF SJs SPs ST TAT TS	Intuitive feeler Intuitive thinker Reflective Observation Sensing Sensor-feeler Sensing judger Sensing perceiver Sensor-thinker Thematic Apperception Test Teaching Styles
NFs NTs RO S SF SJs SPs ST TAT TS VAK	Intuitive feeler Intuitive thinker Reflective Observation Sensing Sensor-feeler Sensing judger Sensing perceiver Sensor-thinker Thematic Apperception Test Teaching Styles Visual, Auditory, Kinesthetic

CVI	Content Validity Index
CVR	Content Validity Ratio
DSD	Directorate of Staff Development
QAED	Quaid-e-Azam Academy For Educational
	Development

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#### Nayyer Sultana

### DEDICATION

I earnestly dedicate this feeble effort to my loving mother Gulshan Nazir (late) who had been the greatest source of inspiration and guidance during the course of my education and whose dreams I am going to transform into reality.



I very humbly attribute the credit of this effort to my loving and caring husband Muhammad Kaleem Khan whose ongoing love, support and sacrifice made all this possible.

### **CHAPTER 1**

### **INTRODUCTION**

#### **1.1. Background of the study**

Empowering the excellence of education is taking place as an international agenda regarding every stage of education. The essence to fundamental edification is imperative for the preparation of organism to confront the consequences of stages of edification. It is also imperative to gain the necessary fundamental living capabilities. Psychologists and educational leaders are increasingly recognizing the importance of the procedure of the education. In their opinion, keeping the knowledge of how the apprentices grasp the content is indispensable for the enhancement of education. Education is an essential need of human beings like other needs. It is tried by experts to universalize education. They tried to enlarge and enhance amount and essence of edification. It becomes the reason of the manifestation of novel ideas in the area of edification. Education is working for the growth of living beings, by upbringing creation, an individual's abilities and by developing skilled manpower.

In view point of Awan (as cited by Safia, 2010) education is necessary for the development of strong intellectual qualities in a healthy body. It is a developmental procedure of work/assignment of an individual that strengthen him to have a grip over his surroundings. It fulfills his expectation. In this manner an individual develops his self-capabilities with the stipulate of civilization. Education refers an organism's attitude and his individuality in wishful manner. The advanced countries have knowledge about the aspiration and significance of education. They realized their responsibility to facilitate

every inhabitant with education. It is the responsibility of the state. Similarly, it is happening in the developed states. The legitimate responsibility of the administration is to facilitate prerequisite of edification for all inhabitants (Government of Pakistan, 2000). According to National Education Policy (1998-2010) importance of education is replicated here. Education is a driving force which facilitates people with intellectual, bodily, dogmatic, and ethical preparation. Thus, along with enabling people with these qualities, it also strengthens them with great understanding of their goal of life. It strengthens them to attain that goal. Education also fulfills the spiritual aspects of life along with fulfilling the aspiration of concrete world.

The excellence of edification in basic erudition setting and also at high stages edification organizations is dependent of the instructional strategies. It is a widely accepted reality that trainers are the dynamic contributing power in the background of the edification excellence in edification organizations (Golla & Deguzman 1998). Trainers are performing their exemplary part and are on the position of the information provider to learners of early ages and also to the youngsters. Thus, the younger age group becomes competent and well-informed. Trainers fulfill the aspirations of youngsters in such manner that they attain crucial, admiring intellect capabilities that are helpful for them in order to get regulated in the real world of factual so that there might arise minimum regulation issues. It is imperative for trainers to formulate instructional presentations in such a manner that enhance those capabilities in apprentices which are helpful for them to set erudition apparent and significant for them (Salavin, 2003). Way of erudition has been defined by several investigators usually as an indicator for personage diversities. These diversities can be seen in ways of someone's living or rather in kinds of traits (Zhang & Sternberg, 2005). In view of Kolb (1984) and Honey & Mumford (1992) illustrated ways of erudition as personage preferences or manner of habit of the perception and transformations of information. In the view of Kolb (1984), psychosomatic characteristic, that are consequences of personage diversities, establish the meticulous techniques an organism opts during erudition. Whilst, Keefe (1987) highlights ways of erudition like intellectual, sentimental and psychosomatic characteristics that play the role of comparatively established symbol of apprentices' perception, interaction and reaction to the erudition setting.

So many efforts are taken into account for the purpose of enhancement of apprentices' scholastics accomplishment. This is an apprehension for many devoted trainers and parents that their apprentices and offspring succeeded in their lives at excellence. For this purpose, most of the trainers agreed upon the point that there is positivity in their behavior to be successful scholastically. Establishing the interrelationship of LS and academic performance of students is a divisive problem. There should be long debate and line of investigation explored on it. Researchers are not concise upon the idea of correlation between LS and academic performance. On the other hand, a group of researchers is against this idea. Teacher is easy and comfortable when he knows what preferred ways of erudition of the apprentices are. With the intention of performing effectively in the classroom, ways of erudition are very important (Cassidy, 2004). Numerous lines of investigation have been established in Pakistan to explore preferred learning styles of the students. These research studies are aiming at

investigating various factors affecting students' academic achievement which is result of students' achievement motivation. It was also aimed to judge different teaching styles and their relationship with students' achievement motivation. Regarding all this, Farooq et al. (2011), established a line of investigation in the urban areas of Pakistan examined and studied different component affecting students' academic achievement. They took 10<sup>th</sup> grade students (300 males and 300 females) to explore relationship between academic achievement and so many other factors. In order to get information about different factors regarding academic achievement, they used questionnaire as research tool. The result of the investigation depicted that socio-fiscal position and parents are strongly affected on apprentices on the whole scholastics accomplishment and also on accomplishment in the subject of English and Mathematics. The far above the ground and medium socio-fiscal degree influence the presentation higher than lesser degree. This study also revealed that parents' education is more than their offspring's scholastics presentation at beginning grades of erudition. It was also concluded that female apprentices performed better compared to the male apprentices. In Pakistan, numerous research also established to investigate preferred styles of students at different levels. On these lines, one of same study was conducted by Irfan et al. (2012) to investigate learning styles preference among medical students. As a research tool, Honey and Mumford way of learning catalog was adopted by the researcher for the purpose of identifying preferred ways of erudition of the apprentices. It was indicated by the result of this that there was diversity of learning styles among medical students. Post graduate medical students mostly possess the reflector learning styles. Whereas, it was indicated that undergraduate medical student mostly possess activist learning styles. This entitles for assortment of directional and

evaluation modalities to match them. For the purpose of making instruction and erudition smooth and influential, it is significant to establish a match in ways of erudition of apprentices and instructional techniques of the trainers. Mismatch in instructional style and erudition style results in difficulties for teachers to improve students' achievement motivation which leads to students' academic performance.

It was investigated that self-government is perceived into form of an imperative dimensions of teaching and learning procedure. With the help of this, people are able to comprehend their abilities and intellects that these make them influential being a proficient and, in the manner, they achieve a good status in others' minds and hearts. Because of all the comprehension and knowledge of them regarding environment is developed through social relationship (Pintrich & Schunk, 1996). In the same way, learners enhance their internal energy with which they deal with people in a proficient and effective way in response to routine of life experiences and complexities that they have to cope while learning. An investigator referred this idea as an ability of person to manage his routine life experiments and a sense of proficiency related to impetus (Dowson, 2001). Accomplishment impetus is actually a accomplishment strengthen drive in an individual and it is determined as one's chief to attain something and to enlarge his/her way of learning (McInerney, 2001). It was apparent that all trainees persuaded to an aspiration of accomplishment as all the individuals were influenced by some extent of attainment motivation. The degree with which we have aspiration for our attainment is based on this prospective along with our amusement of attainment (Dowson McInrney, 2003). Because their amusement of learning has relation with that of the sense of work. This focus of attention for learning has similar relationship with influential information. Their urge for gaining in life settle their goal-oriented behavior and they have firm belief that they have good control to attain mastery (Dowson &McInerney, 2001).

The ideas depicted by goal line of approach is that people are put into the situation of motivation, to keep them away from failure(as it is related to performance goals) or they have to attain accomplishment (as it is related to mastery goals). As far as prior situation is concerned, the people opt to choose less complicated or severely complicated work/assignments which will achieve accomplishment or finds reason for occurrence of failure. The scenario portrayed afterward depicts that people opt to choose work/assignments with medium form of compilation, then it will become a target of learner's great interest, although it constantly possess the high level hopes for accomplishment (Nicholos and Throkildsen, 1995). Those learners who opt for goal have achievement customary that are developed by themselves. They perceive success in shape of mastery and learning. Learning and motivation is affected by mastery goal in a positive way. These goals are interrelated with highly cognitive tasks, self-efficacy at higher degree, see to get target and the solution of the issues (E. M. Anderman, Maehr, and Midgley, 1999). Performance goals are referred as a wish to obtain positive judgments and leave unfavorable judgments of an individual's expertise and worries (Murphy & Alexander, 2000). Major role of performance goals are to take success as a performance regarding others. Attention towards the success and leaving it (Elliot &Harackiewicz, 1996) depicted in this explanation of goals attracted the focus of researchers. Goals that are chased by performance are linked with higher degrees of achievement. But these goals are of normal level of learning and captured the attention of extrinsic reward (Midgley, Kaplan, & Middleton, 2001). If an individual avoids performance goals, their effect on achievement regarding behaviors are negative. This prevention from performance goal cause wrong processing, poor withholding, and self-flaw full hand techniques as delay in decision and refusing to take others' help (Midgley and Urdan, 2001).

Idea regarding attraction towards success and leaving it, especially, in case of performance goal, has attracted the attention of researchers. They also focus on the development of research tool for reflecting this success (see for example Midgley et al., 2000). The facts also exist that are reflected by studies in which quantitative data is used and inductive analysis is done, do not show attracting and learning of success by performance goals. In views of learners, these are grade goals that learners wish for achieving good results and take reward that is interrelated with tremendous performance. These goals reflect a wish for showing their competence, but this is not related to others. In viewpoint of Brophy (2005), attraction /leaving success through performance goals are a "low incidence phenomenon" as individual unexpectedly presents performance goals accompanied with communal assessment while presenting causes in favor of attainment. Urdan and Mestas (2006) also strengthen this idea. In their view point researcher miscalculate exaggeratingly the natural happening of mastery and performance goal in meticulous scenario. The causes of individual learner's engagement and wish for attainment at school are also looking for causes in spite of competency. By all this, it is apparent that TS, LS and SAM have impact on teaching learning process.

#### **1.2 RATIONALE OF THE STUDY**

Numerous research studies have been conducted on teaching styles, learning styles and students' achievement motivation. In most of the studies, researchers took these variables independently or established relationship of these variables with some other influencing variables. One of the line of investigation regarding teaching styles and adolescent's psychological development was conducted by Khurshid and Aurangzeb (2012). Findings of this line of investigation reveal that there is positive correlation between teachings styles and adolescent psychological development. Shiekh and Mahmood (2014) designed a study regarding the "Teaching Style of the English Language Teachers" however, they also diagnosed the impact of number of styles which are forcing and encouraging the level of English language student. Moreover, research evaluate that, every teacher has different learning styles, philosophical approach and understanding regarding the styles of learning. Peacock (2002) investigated the priority regarding LS of English as Foreign Language and English as Second Language. The outcomes of this research showed that students are in favor of kinesthetic ways of erudition regardless of all, whilst usually used instructional strategies that fits auditory learners. One of the latest study established by Riazi and Riasati (2007). In their research of giving principles to learning styles of Iranian learner of English as Foreign Language it was concluded that these learners gave priority to an active participation of classroom procedures. They approached to have communication and relation with other learners in the classroom. Kassaian (2007) explored the impact of two kinds of instructional strategies on the learning of new expressions. This line of investigation concluded that students learn best when material presented to them visually. Kia, Alipour and Ghaderi

(2001) conducted a line of investigation. They explored that among the apprentices in Payame Noor institution of higher education in Iran, those with ways of erudition involved visually possess the greatest scholastic accomplishment. Felder et al. also discussed the benefits of the knowledge of identification of LS for the learners. The learners, possessing this knowledge of LS, recognize their goals and objectives in a very easy way. In order to attain academic goals, they select appropriate ways of learning that fits for them. In contrast, the individuals who cannot recognize their LS, fails to attain remarkable accomplishment in life. Knowledge of identification of LS is necessary either for teachers or for learners (Felder et al. 2005) If the students are highly motivated and involved in learning, then there will be minimum drop out cases which also increases the degree of learner's accomplishment (Kushman, 2000). The awareness of motivation is beneficial for educators as they have to face so many issues in scenario of learners reacting in different learning actions. Few of them are indulged in innovative learning excitedly. Few of them start learning whatever teachers offer them (Schunk, 2002). One such study was carried out by Irfan et al. (2012) to investigate learning styles preference among medical students. The researchers used Honey and Mumford learning styles inventory to explore preferred erudition styles of the students. Conclusion of this line of investigation exposed that there was diversity of learning styles among medical students. Post graduate medical students commonly have the reflector learning styles while undergraduate medical student commonly have activist learning styles predominance. This entitles for assortment of directional and evaluation modalities to go with them. The study of Rahmatullah et al. (2013) used Kolb learning styles model to investigate the preferred learning styles of students. It was revealed that dominant way of erudition of apprentices was Assimilator as compared to other ways of erudition. The result is that indicator of students with convergent way of erudition had higher GPA mean than the other learning styles. Kruse (2009) said that not a single method is best for all students but variety of it, depending upon individual learner. He found that it is possible for many apprentices' to grasp minute knowledge wrongly very quickly especially when they can capitalize their way of erudition's strength. Philips, et al. (2001) found that different activities were found to be involved in men and women when engaged in activities like reading, listening, experiencing emotion etc. Mastery goals are related with expertise and an increase of information and comprehending by putting efforts in learning (Murphy & Alexander, 2000). Drysdale et al. (2001) established a line of investigation. This line of investigation mainly aimed at exploring whether information regarding ways of erudition of apprentices had influence on learners; scholastics accomplishment. They exhibited that ways of erudition significantly affected the students' achievement motivation. Different lines of investigation were also conducted to investigate preferred styles of students in Pakistan at different levels. Various line of investigations depicted that if ways of instructing are matched with the ways of erudition, this will result in apprentices' erudition attainment (Safarikova, 2016; Arifin, 2015; Budiarta et.al, 2014; Kovacic, 2014; Peacock, 2001).

It was concluded by studying literature review that a study of teaching styles, learning styles and achievement motivation is important to investigate for its better understanding and its importance in teaching and learning process. Therefore, this study was designed to investigate and unrevealed these relations in the context of secondary school level. Moreover, teachers want their students to be successful in their life, and immediate need, to be successful in their learning. They prepare their students to tackle problems. Teachers try to keep their students far off from failure. Teachers give incentive to their students so that they may encourage to do good things like that in order to be prominent in teacher's eye. With the proper teaching style that fits for students' successful learning, students' achievement motivation can be improved. This will be a reinforcing agent for their future academic success in higher grade classes. This will open new horizons for the students to opt for different fields of their choices. Their success at this level of secondary school will set goals and fields of their choice like medical, engineering, finance, law etc.

#### **1.3 STATEMENT OF THE PROBLEM**

Today's classrooms depict diversities among students. It is a fact that diversities prevail in so many dimensions of apprentices. These diversities can be related to their culture, their religion and their family backgrounds. Apprentices also differ regarding their region and types of schools from where they are receiving their education. All of these dimensions of diversities have major importance in Pakistani scenario. These diversities cause variation in apprentices' learning. One of the major issues in learning is to take into consideration instructing styles. This issue is also counting in learning. In order to accommodate diversities of apprentices, it is imperative for students at secondary school level to utilize variety of TS are being used by the teachers in their classes. The role of teacher is a necessary element of teaching. So, it is vital for him to be an expert in what he should teach (substance/matter) and in what way he should teach. Teachers apply a number of teaching methods in order to teach specified subject matter. In order to enhance learning of the students, teacher has to give a reflection over situation. Teacher has to back up students to keep inventiveness and tremendous logical skills. This is essential to all teachers that he/she must possess his own philosophy regarding education and instructional plan as this aids him to organize well in selection of instructional substance. These ideas regarding the teaching styles, gaining knowledge and the reason of gaining knowledge of learners establish a fundamental step for the strong effect of learning. If we see on the part of the students, we come to know that the awareness regarding the LS is vital for learners. When student is capable of recognizing the ways of erudition, he/ she will synthesize it in the teaching and learning setting. This is helpful for students and students do best in their learning. Knowing of LS is helpful for the learner to overcome the issues confronting in teaching and learning process. Knowledge of LS is also helpful in controlling their lives. This knowledge of learning styles identification is helpful for the learners to develop an ability of solving problems effectively. Identification of learning styles of students builds confidence and self-reliance of learners. It gives vision to students about his own capabilities, potentials and deficiencies. Students come to know in what way they make learning enjoyable and effective. Erudition is a standard and outcome of influential instructional process. Erudition is the final objective of instructional process. If the students are highly motivated and involved in learning, then there will be minimum drop out cases and it will increase the degree of learner's accomplishment. So, thrusting the apprentices into a situation that is interesting in school and motivating them to accomplishment are the targets of the teacher. It is evident that when learner attains middle school, a large number of learners show less interest in school assignments. Some teachers have the

view that their obligation is merely to transfer knowledge. Motivating apprentices is not included in their duties. They just have to utilize time only to transmit material. This will not be sufficient to fulfill his duty. Motivation is significant feature of the learning setting. There are some needs accompanied with those learners who enter in the classroom. Students seek completion of a specific work. They are in need of seeking novelty of experiences. Perfection in skills is needed. They need overcoming the targets. Competence in work is needed. Success and well-being are required. Involvement and interaction with other people is needed. It is essential for teacher to choose adequate strategies of motivation for the satisfaction of learners' aspiration. In this world of great competition, academic attainment is a symbol of learners' future. An attainment is an imperative objective around which educational process revolves. Its position is of a major goal, that all the learners are required to work on it. While educating a learner, teachers as educators, keep into consideration one major objective, that is, their accomplishment. To transform and amend educational setting in such a way that keeps a linkage between student learning styles and teacher teaching styles, is the need of the hour. A very good students' academic performance can be achieved in this way.

Keeping in view the importance of teaching styles, learning styles and students' achievement motivation, the researcher selected the area of teaching styles as perceived by the students, ways of erudition and attainment accomplishment at secondary school level for the conduct of the line of investigation. The study was designed for investigating the ways of instructing in perception of apprentices, learning styles and the degree of attainment motivation of understudies at secondary school level. This line of investigation further aimed to assess the interrelationship of the ways of instructing

in perception of apprentices, ways of erudition and students' attainment motivation at secondary school level.

### **1.4 OBJECTIVES OF THE STUDY**

The present line of investigation intended to;

- 1. Explore various teaching styles as perceived by students at secondary school level.
- 2. Determine the learning styles of students at secondary school level.
- Investigate the level of students' achievement motivation at secondary school level.
- 4. Examine the interrelationship of teaching styles as perceived by students, learning styles and students' achievement motivation at secondary school level.

#### **1.5 NULL HYPOTHESES**

This line of investigation comprised of the subsequent hypotheses.

Ho1: There is no significant interrelationship of teaching styles as perceived by the students, learning styles and students' achievement motivation of students at secondary school level.

#### **1.6 THEORETICAL AND CONCEPTUAL FRAMEWORK**

The present research study is based on the theory of Grasha's teaching styles. Neil Fleming's VAK model was taken for exploring the learning styles of students. For achievement motivation, McInnerney theory was used. Detail is as under;

#### **1. Teaching styles:**

The present line of investigation was based on Anthony Grasha's Teaching Styles. Anthony Grasha(1996) recognizes five ways of instructions that apparently illustrate the existence of instructional staff in the learning setting. They are Formal Authority teaching style, Expert Style, Facilitator, Delegator and Personal Model Teaching Style.

These stylistic characteristics of teachers are presented in the following discussion.

#### i. Formal authority

In this teaching style, teacher straightens the path for the students and arranges tasks performed in such a way that are accepted by everyone. Those teachers have a specific position among other teachers who are practicing this approach of teaching styles. Teacher is considered as an expert and a person having arranged expectations and rule of conduct. Teacher with the characteristics of this teaching style gives students such structure that is essential and imperative for learners in their learning.

#### ii. Expert

This style depicts that teachers' role is of an expertise, who possess all the knowledge that is essential for students. The main benefit of this teaching styles lies in the sense that teacher is a highly qualified figure regarding a knowledge bases technique.

#### iii. Facilitator

In this style of teaching, role of teacher is of a facilitator. As a facilitator, only teacher gives assistance to students. In order to hold a questioning session, teacher gives options to students. The significance of this teaching style is that, in this style teachers perform as a facilitator. The main concern framework of teaching style is to produce in students the ability of thinking and performing independently. This approach takes into account the student's need and goals. This style of teaching also gives chance to students the creativity in intellect.

#### iv. Delegator

In this framework of teaching style, students perform in an independent way or an autonomous group having the help of teacher as a resource figure. Another benefit of this framework of teaching style is that it develops a sense of independence and freedom in students. They put themselves on higher position and leader of their learning in their imaginations. Somehow, it is not beneficial in the sense that teacher fails to understand about the willingness of students to perform in an independent way and this will be a severe cause of anxiety.

#### v. Personal model

In this teaching style, teacher is an exemplary figure. The main focus of teacher is to promote among students observing, copying and analyzing ways of handling things. Its noticeable benefit is that its main concern is observing, imitating and copying exemplary figure. The drawback of this style of teaching appears when teacher forces to follow his way as he is one and only figure to be followed in teaching and learning process. In this scenario, students do not feel comfortable and easy and thereby starts frustration in the minds of students. When there is no positive relationship, students do not fulfill teachers' expectation or quality enhancement standard.

## 2. Learning Styles;

The research study was also concerned with Fleming's (2001) VAK model, ways of erudition of students. The VAK Learning Styles Model recommends that usually it is possible to classify the students in the three ways of erudition that are preferred. These ways are visual, auditory and kinesthetic learning styles. In detail, we can discuss as:

#### i. Visual learner

A person who learns best by seeing is considered as visual learner. These learners retained knowledge in an influential way that they perceive and gain by their seeing. In order to get knowledge they increase the usage of diagrams, figures and flash cards in their learning. This type of learner has difficulties in understanding of spoken words or directions. They also found difficulties in taking notes through lecture or in reproducing spoken ideas. These learners feel comfortable with perceiving and

organizing knowledge with their sense of seeing. These learners excel in learning by reading or observing things. The main focus of visual learner is on the sight of word. They do not focus on the arrangement of word or the way it sounds like.

## ii. Auditory learners

Individuals of this type gain and retain knowledge successfully with the use of hearing materials referred as auditory learner. These learners are in favor of discussing, talking things and paying attention in the manner in which others have spoken. Auditory learners use to read something loudly to understand it effectively. For these learners spoken words have imperative meanings in them when they listen the way they sound. Learner of such style takes advantage of video or audio tapes in order to enhance their information.

## iii. Kinesthetic/tactile learner

When someone learns things from doing; moving during learning and takes advantage of hand on activities, these learners are called kinesthetic learners. Kinesthetic learning finds it a bit hard to sit calmly for a long time. Kinesthetic learner gains knowledge by experimentation. These learners keep themselves busy in touching and doing things for learning. They are active participants of learning process. These learners like situation which is practical and gives them a chance to put together segments and participate in physiological commotions. Kinesthetic learners have very high hand-eye-coordination and their receptors are very quick.

#### **3.** Achievement Motivation Theory:

Third variable of the present study was students' achievement motivation. It was based on the theory developed by Dowson and McInerney (1997) that defines accomplishment impetus as an organism's desire of accomplishment, it came into existence as a competence in his/her potential and acts like a master who is the symbol of upper standard of achievement accomplishment (Dowson &McInerney, 2003). In the field of achievement motivation, there are three different kinds of goals as; social, mastery and performance goals.

i. Social Goals

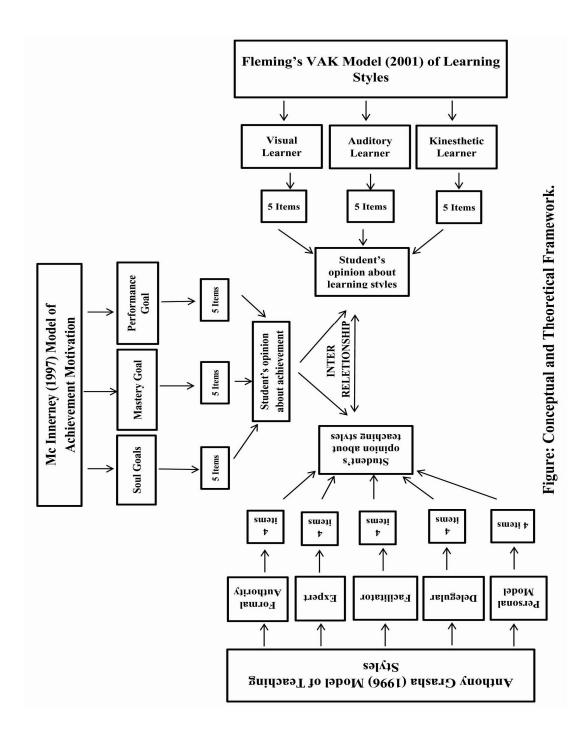
Instead of putting efforts that fit the end, social goals exist. These goals are in form of relation of individuals.

## ii. Mastery Goals

These goals are also regarded as learning goals. Major attention of these goals is basically an attainment of expertise or forming mastery in handling novel clumps of knowledge, ideas or belief or capabilities.

iii. Performance Goals

Besides the mastery goals, there are ego related goals. These goals are performance goals. These goals are also regarded as ego related goals. These goals emphasize on achieving essence value built on norms, putting efforts for the best.



The intangible representation of the present line of investigation could be seen in figure 1.1. All 5 dimensions of TS were collectively used as teachers' styles. TS as perceived by students were measured through (20-items), each dimension of TS contained 4 items. Three learning styles were taken as students' preferred learning styles (15-items each dimension contained 5 items). Whilst 03 types of fields of accomplishment like social goals. Secondly there are mastery goals followed lastly by performance goals. Cumulatively all these goals are regarded as accomplishment impetus of apprentices. Many investigators of the field resolute the TS as perceived by the students of secondary school level, students' preferred learning styles and accomplishment impetus of apprentice at secondary school grades. Researcher established the interrelationship of three variables of the line of investigation and furthermore, among the different dimensions of TS, LS and Students' achievement motivation of secondary school level. The study examined by Puja and Ahmad (2016) in which research diagnosed the dominancy of learning and enhancing methods regarding the history student's education. This discourse used the Myer-Briggs type of learning style as an indicator which is respectively explained as, extrovert, sensing, intuition, thinking, feeling judging and perceiving. Research results described that, the learning technique at higher level is promoted by the teachers for better understanding. However, researchers proposed the implication that, this sort of learning makes and reshapes progress at higher level. For better understanding and evaluation, the policy makers follow this method for initiating progress at this level.

The study of well-known researchers Simelane and Mji (2014) proposed technological development at the strategic levels for better progress. The researchers examined "technology-engagement teaching strategy" (TETS) which triggered the exposing level of learning of students in Mathematics. Further, for enhancing better progress, the researchers timely and repeatedly assessed the participants' engagement with technology and its impact on their minds. However, after analyzing data, researchers diagnosed that, the relevant operation of TETS with Aid of Clickers drastically improved the apprentices' learning progress.

The researcher Syofyan and Siwi (2018) designed study in which they explained the learning habits of Economics students. Their review regarding literature explained that learning styles repeatedly makes volunteers impacts on apprentices' progress. Researchers evaluated the students of "economic education students" deeply prompted and were very familiar with visual learning style which dramatically boosted their learning capabilities. If we see deeply, we observe that these three variables of the present research study, TS, LS and SAM, revolve around the need-press theory. This theory has been popularized by Pace and Stern (1970). This is a theory of person-environment congruence in which complimentary contribution of personal need and environmental press can enhance students' learning outcome. Chatterjee & Ramesh (2015) have also used this theory in their study in the form of Person –Environment Fit for linking teaching styles and learning styles as a measure of person environment fit to assess students' performance.

Further, the study of Shiekh and Mahmood (2014) was designed regarding the "Teaching Style of the English Language Teachers" however, they also diagnosed the impact of number of styles which are enhancing the level of English language students.

Moreover, research evaluate that every teacher had different learning style, philosophical approach and understanding regarding the styles of learning. It is universally accepted that styles always draws impact on students' capabilities and level of understandings. The interest building and consistently engaging the attention of students is a tough challenge for teachers while they are teaching English at the middle and medium level. However, with reference to Pakistan's Education system, English is compulsory for Primary, Secondary, Intermediate and Bachelors classes. Due to the odd and traditional teaching methods, most of the students in Pakistan are stuck and dislikes this most sophisticated and revolutionary language. For this, the researcher in this study raised important points as (a) it is important to investigate the level of engagement and motivation peak of students towards the learning style of English, (b) to examine the appropriate methods of teaching style regarding English language learning methods. Furthermore, the study was also delimited to 10 prominent English teaching schools of Pakistan. They selected 20 teachers as sample of the study and also students from their respective classes where they were teaching for understanding the level of encouragement and motivation regarding the learning of English at secondary level. For collecting data, the instrument "Know your method" and "English Level Motivation" have been used for exposing their style of teaching and their method appeasing the students and motivating them for learning English at this level. The Data was interpreted and analyzed while using most sophisticated social sciences tool SPSS. The study investigated that the prominent and very ducky style of teachers were "Delegator" which is basically appearing and forcing students for learning. Moreover, next two styles which were used respectively were "Expert" and "Role Model" empowered teachers with central role to teach.

Regarding the importance of adjustment in improving learning and adaptive behaviors of students, the study of Concerning about the very important aspect of leaning and behavioral change of students, the study was designed by the Khandaghi and Farasat (2011) which is being organized for underlying the concept of two types of learning. For this, research instrument teachers and students were being examined by researcher for understanding the student's emotional, educational and economic progress. The research diagnosed that the teachers using active style produced students who are very familiar with learning and adjusting well with social sector while those using inactive style could just produce students who are mostly less active and less familiar with social issues. The result shows that all this happens based on style of learning. However, researcher explained that there are huge differences between active styles and inactive styles being used by teachers for social and emotional learning. But it has been proven that social adjustment significantly progresses in both styles of teachings.

Ilçin, Tomruk and Yeşilyaprak (2018) diagnosed the learning style and academic progress to understand about the progress of physiotherapy students. The study examined the impact of learning styles on students' progress. For this instance, the learning style of 184 students of physiotherapy is being evaluated by the researcher while adopting the method of "Grasha-Riechmann Student Learning Style Scales". However, CGPA scaling is being used by the researcher for scaling and measuring the level of progress. The Kruskal-Wallis test was used by the researcher for conduct of learning styles groups (Independent, Dependent, Competitive, Collaborative, Avoidant, and Participant). It has been diagnosed that Turkish Physiotherapist students are most dominantly attached and familiar with "Collaborative Learning style". However, it has been investigated that the

more active and advance is the style, the more powerful is the impact on the minds of students.

The teaching style on Turkish students is drastically increasing the progress of students. The researcher reported that the area where teaching style is used has better progress as compared to other blocks in Turkish Schools. The research explained that, this study is being used for understanding the nature of style which draws impact on students' minds. However, it has been proven that, numerous learning styles reshape and boost progress of students.

The study of Ridwan, Sutresna and Haryeti (2018) has examined the teaching styles and learning styles has been examined. However, the correlation of this study exposed that for the 15 teachers and 188 students simple random sampling technique was used. However, the SAILS and VARK questionnaires style is used for analyzing the teaching and learning style via online methods of learning. The frequency, percentage, chi-square and Mann-Whitney analysis with SPSS version 20 were being used for analyzing the study. However, many of the teachers highlighted the "Single-Model teaching style" with Kinesthetic (K) preference, further the student chosen "All-Model (VARK) style". However, it is evaluated that there is huge difference between teaching styles and learning styles. So, it has been accepted that the teaching style sometimes does not work and teacher should adopt more than one style while students also adopted the student learning style and needed to keep updating its learning capabilities. This will initiate and make progress most effectively advancing and boosting progress of adaptation and it is very generous for classroom progress requirement.

In the causal comparative study of Angela (2014) in which it has been determined as the event that a measurably huge contrast existed in the numerical accomplishment of rudimentary understudies in homerooms driven by educators with various predominant instructing styles which is proposed by the (Grasha, 1996) teaching methods and based on numbers of years of teaching experience. In the line of investigation conducted by Khalid, Akhter and Hashmi, (2017), they tried to investigate the tenth grade auxiliary schools English educators' showing styles and learning styles of their understudies and look at the possible connection between training learning style match with understudy's scholastic accomplishment as demonstrated by their last optional educational committee's outcomes. An example of 42 schools was chosen from the number of inhabitants in Punjab region government schools. All the English class understudies and their class educators were the respondent sof this examination. Pertinent data was gathered through instructing and taking (enhancing or learning) in styles inventories from teachers and their students and English subject result was gotten through their respective schools. The present condition is utilized in Grasha's stock (1996) method in assorted learning styles classes identified with students and explore encouraging styles identified with educators. Grasha's stock was utilized on five sub classes of the scale. Information was dissected utilizing enlightening insights procedures. The outcomes exhibited that understudies' learning styles and their accomplishment in English course had measurable importance distinction among them and genuinely importance impact was not found, between students learning styles and teaching styles on students' English accomplishments

A line of investigation conducted by Sheikh and Mehmood (2014) had bases on the fact

That, one of the sources of motivation for apprentices' of English is the TS of their teachers.

This line of investigation had its root in the self-determination theory. This approach is very much effective in motivational field. In the view point of Deci and Ryan (1985), this motivational approach is a role model which is one of the helpful source on the part of learners for understanding the connection of behavior and motivation. The main idea of this approach states that human beings are active living beings with innate power of development and growth. They have ability of taking risk and handling challenging situations. They have power of relating their experiences, by their self. This development is not somehow automatic but have social influences.

Teachers' TS are influential and helping aid for apprentices' LS. This combination of TS and LS influences their self-determination for erudition. Secondly Sheikh and Mehmood (2014) took attribution theory for achievement motivation. This approach depicts how human beings see the situation that is going on in their surroundings. It makes clear that human beings significantly reflect and express their attitude and thoughts about these situations. The focus of this theory is to know about the causes of actions of people. In the field of motivation, this approach is liked by many people. With the help of casual attribution this motivational approach becomes a source of link between apprentices' previous experiences and their incoming efforts . According to this theory apprentices make their previous self experience as a source of forthcoming life objective. According to this approach person's previous failure leads to his/her achievement of objectives. A person's achievement depends upon his/her past failure. These types of experiences form previous idea regarding motivation.

The researchers Aldajah, Haik and Moustafa (2014) undertook a line of investigation on the mechanical designing apprentices and their educators at the United

Arab Emirates University. Results showed that the understudies learning styles are adjusted: dynamic intelligent, natural sensor, visual-verbal and they leaning towards worldwide successive learning style. Additionally, the teacher's instructing styles were a blend of master, formal-authority, individual model and delegator. This range of showing addresses the vast majority of the understudies learning techniques, which considers emphatically the learning cycle. This paper gives proposals that educators can upgrade the instructing interaction to new horizon.

The researcher of study Övez and Uyangör (2016) briefly explained in their study how much arithmetic teacher instructing at optional school sixth, seventh and eighth grade students are encouraged dependent on understudies' (students) learning styles and to uncover how powerful coordinating with instructors' (students) training styles with students' learning styles in understudies' (students) accomplishments is. As this exploration intends to uncover all the things considered, study model was utilized in this examination. The consequences of this examination uncover that educators plan the learning conditions relying upon their own learning styles and that there has been a cozy connection between instructors' learning styles, apprentices' learning styles and apprentices' accomplishments in arithmetic classes, that understudies' accomplishments increase when instructing is done dependent on their learning styles.

The investigation of Shih and Gamon (2001) broke down the connections between understudy accomplishment and the accompanying factors: disposition, inspiration, learning styles, and chose socioeconomics. This populace study included 99 students taking two electronic courses offered by the school of farming at a land award college. 74 (75%) apprentices' finished a learning style test, an on-line survey, and got an evaluation before the finish of the semester. The learning style test was the" Group Embedded Figures Test" (GEFT), which characterized understudies (students) as either field-ward or field-free. The on-line poll comprised of two scales (inspiration and disposition), whose "pilot-test" reliabilities were .71 and .91, individually. More than 66% of the understudies taking the online courses were field-autonomous students; nonetheless, there were no huge contrasts (.05 level) in accomplishment between fieldward and field-free understudies. Additionally, understudies (Studies) with various learning styles and foundations adapted similarly well in electronic courses. The understudies appreciated the accommodation and self-controlled learning pace and were inspired by rivalry and exclusive requirements in online learning. Inspiration was the solitary critical factor that clarified more than one-fourth of understudy accomplishment estimated by class grade.

The present research of Knaujia and Bhattacharya(2016) stated the impact of accomplishment inspiration on learning styles. The reason for this investigation was to see if there was a specific learning style of high accomplishment rationale understudies (students) and low accomplishment thought process understudies (students) or not.. This examination considered just high accomplishment thought process and low accomplishment rationale students. The investigation found that there was no huge contrast in Learning Styles of high accomplishment rationale and low thought process students. They favored same learning styles to learn with the exception of touchy v/s natural learning style where obvious style did not arise.

## **1.7 SIGNIFICANCE OF THE STUDY**

All the approaches and models of teaching styles, erudition styles and students' attainment accomplishment are the bases for practical implementations. Therefore, if teachers have the knowledge about their teaching style and learning styles, students' achievement motivation and their interrelation, they would use and apply the style of teaching in a better way. This research study will be helpful for teachers to recognize what style they are using in their teaching. Either it fits for that particular subject matter or it matches with the learning styles preferences of students. It will give aspiration to students to achieve the goals are symbol of learners' future. Having an insight of these aspects will strengthen the teachers to influence their teaching positively in educational process by making their lesson plans. They utilize their audio-visual aids and hand-on activities in their teaching to fulfill the requirements of diversities of all students in the classroom. This will make their teaching effective in their respective classroom. In this way, a healthy competition can be created not only in the classmates; section wise and ultimately in all the classes of the secondary school level. If we see on the part of the students, the awareness of what type of teaching style fits for their learning what does it makes for the achievement motivation leads to build their confidence and self-reliance. It gives vision to students about his/her own capabilities, potential and deficiencies. It will make learning enjoyable and effective. It will also create motivation and interest in students to complete their assignments which will be a positive aid to lessened dropout rate of students. When all these things are exclusively handled, this situation will be appealing for an increase in enrollment in public sector schools. This may give strength to educators in curriculum development and administering correlated assessment.

Findings and conclusions of this line of investigation provides guidance for education setters, organizers and strategy developers headed for an excellence of education at secondary school level. It will be beneficent for all the DEOs and EDOs and for the DSD for the purpose of training of the teachers. This study can provide educators awareness that their teaching styles may affect their students' performance. The line of investigation like this will be helpful for the educators to plan, organize and serve excellence direction in the way that is enhancing students' learning. It will be helpful to expand and improve such faculties for students that play their role as useful citizens of Pakistan. The line of investigation would provide a benchmark for further study in educational areas.

## **1.8 METHODOLOGY**

This part of present line of investigation includes the methodology and procedure which was used in order to establish the research work including the research approach. Population and sampling techniques were also the part of the present line of investigation. Instruments were most important tools to conduct the present line of investigation. Data collection and data analyses strategies were also discussed under this part of line of investigation. The details are given there;

## **1.8.1 Research Approach**

It was a quantitative line of investigation. In this type of approach actually data is gathered in numeric form. Furthermore, interpretation of consequences are made.

# 1.8.2 Research Method/Design

Descriptive method was used. The research study was co relational in nature

# **1.8.3 Population of the study**

There were total 365 public schools of secondary level located in Tehsil Rawalpindi.

Table1.1 Research Population

<b>Region/Tehsil</b>	Type of school	Total schools	Total N	
Rawalpindi	Secondary school	365	5212	

## **1.8.4 Sample of the study**

50 public schools of Tehsil Rawalpindi were targeted and these contained 521 students.

Only those schools were approached where there are arts students of humanities group.

Table	1.2 Research	Sample
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Region/Tehsil	Typeof sch.	Total sch.	Ν	n Students
Rawalpindi	SecondarySchools	365	5212	521

## **1.8.5 Instrumentation**

For the survey three questionnaires were used. three questionnaires were selected in this study. Three questionnaires one each for assessing teaching styles, learning styles and students achievement motivation were modified by the researcher with the help of supervisor. Then these were validated through pilot-testing. Detail is as under;

## **1.8.5.1** Demographic Variables Information Sheets (DVIS)

This consisted of only respondents' school name.

## **1.8.5.2 Teaching Style Questionnaire**

Teaching Styles was developed by the researcher with the help of supervisor. It was based on the theory of Grasha's teaching style. It consisted of 20 items.

## **1.8.5.3 Learning Style Questionnaire**

Fleming's (2001) VAK instrument also known as VAK Learning Style Questionnaire. This tool was adopted in order to examine the ways of erudition of students. It contained 18 valid items, each of 6 comprising of 3 learning styles of students.

## 1.8.5.4 Students achievement motivation Questionnaire

Third research inventory was used to measure achievement motivation. It was developed by McInnerney in 1997.

## **1.8.6 Data Collection**

All participants of the present line of investigation gave their opinion regarding the questionnaire. In order to take opinion regarding the questionnaires, the researcher gave short description of the objectives of the line of investigation. The researcher also assured the respondents that their opinion will be kept confidential.

#### 1.8.7 Data Analysis

Once data was gathered the next step was its screening for error. In order to draw conclusion, strategies of descriptive and inferential statistical analysis were made.

# DELIMITATIONS

The present research study was enclosed to

- 1. Public sector secondary level schools of Tehsil Rawalpindi.
- Arts group, secondary level school students of grade10<sup>th</sup> studying subject General Science.
- 3. Academic Session 2017-2019.

## **1.9 OPERATIONAL DEFINITIONS**

**1.10.1 Teaching Styles**: Teaching styles are referred to those methodologies and strategies which teachers use during instruction. It means variety of teaching tactics or a specific instructional format being followed by teachers. In this research study, teaching style is the way of presenting knowledge to apprentices in a meticulous manner. Grasha

identified five teaching styles, formal authority, expert, facilitator, delegator and personal model.

1.10.1.1 Formal Authority: Teacher with this style sets standard.

**1.10.1.2 Expert**: Teacher having expert teaching style transmits information.

**1.10.1.3 Facilitator**: Teacher with this teaching style guides students by asking questions and exploring options.

**1.10.1.4 Delegator**: This teaching style of teacher helps students develop ability to function autonomously.

**1.10.1.5 Personal Model**: Teacher adopting this teaching style teaches through direct example.

1.10.2 **Learning Styles:** Ways of erudition are the manner holding what learners sort and the way how they are processing facts and ideas. It normally refers to a personage's priority in a single manner or combined with. Ways of erudition are the testifying centre for the preferred manners of the perception and processing of knowledge.

1.10.2.1 **Visual learning style:** Someone with visual learning style has preference for seen or observed things.

1.10.2.2 **Auditory learning style:** Someone with auditory learning style has a preference for the transfer of information through listening to the spoken words, of self or others, of sounds and noises.

1.10.2.3 **Kinesthetic learning style:** Someone with a kinesthetic learning style has a preference for physical experience.

1.10.3 Achievement Motivation: It is a capability that is inside the students. By the help of this capability learners make interaction with other people. Students have also mastery of content. For the purpose of doing or completing their work effectively, they have command over the subject knowledge and to do or to complete a work/task effectively. There are three levels of students' achievement motivation taken in this research study namely as; social, mastery and performance goals.

1.10.4 **Interrelationship:** Interrelationship is the connection and interaction between people, groups of people or parts of a system within the system or outside the system. It can often explains events such as success or failure. For analyzing the inter -relationship statistically, mediation analysis(regression) is done in this research study.

The presently discussed section facilitate with a faceted sketch of the present line of investigation like introduction of the concepts of TS, LS and achievement motivation This line of investigation also includes objectives. Additionally, research questions and hypotheses were also the part of the present line of investigation. to cope with the discussion regarding the problem of the present line of investigation. The present section also illustrates the theoretical framework, methodology and rationale of the line of investigation. The leading related approaches and examiners of TS, LS and achievement motivation are thrashed out in the next chapter.

S. No	Objectives	Hypotheses	Statistical techniques	Justification
1	Explore different teaching styles as perceived by students at secondary school level.		Mean scores	For the purpose of taking a representative response, mean scores are used.
2.	Determine the learning styles of students at secondary school level.		Mean scores	do
3.	Investigate the level of students' achievement motivation at secondary school level		Mean scores	
4.	Examine the interrelation ship of teaching styles learning styles and students' achievement motivation at secondary school level.	H <sub>0</sub> 1 There is no significant interrelationship of teaching styles as perceived by students, learning styles and students' achievement motivation at secondary school level.	Mediation Analysis (Using Regression)	It was used due to the presence of multi- collinearity in order to find out the interrelationship of three variables.

Table 1.3 Description of Objectives, Hypotheses, Statistical Analysis and its justification(N=500)

# **CHAPTER 2**

# **REVIEW OF THE RELATED LITRATURE**

The present study is related to teaching styles as perceived by the students, learning styles preferences and students' achievement motivation at secondary school level. Consequently review of literature starts with the elaboration of the three important concepts dealt with in this study, that are, teaching styles, learning styles and students' achievement motivation accompanied by explanation of their allied aspects and briefing about related studies that has been handled by using the subsequent captions.

- 1. Teaching (Teaching theories, teaching styles and significance)
- 2. Learning (learning Approaches, learning styles, Significance of Learning)
- 3. Students' Achievement Motivation (History and Theories)

Literature review keeps an eye on what has already been printed on any area by recognized researcher and attributed by investigator and examiner. By studying literature review, the researcher eventually is in touch with existing situation and became aware of latest contemporary studies about any area. In this way he came to know about the origin and sources of another goal. Similarly he became aware of future research which is required in certain field.

## 2.1 TEACHING

Teaching is not an involuntary, automatic and motorized method or practice, that transfers facts, ideas and information delivered by the teacher and transferred to the students. Teaching is an activity, instructional strategy which triggers off the students to seek learning and obtain the knowledge of skills that is required. It also stimulates students to learn style of livelihood in the community according to their aspiration. It also puts forth students for the purpose of developing their forces and capabilities. In this way, it is possible for them to establish an efficient and valuable modification with the environment, in which they are living. They are also ready for flourishing public involvement (Hattie, 2009).

The process, how to teach, is a very complicated obligation. A number of different kinds of methodologies, technicalities and helping material is needed. What type of nature of these duties is dependent of selecting such type of methodologies and technicalities, learning objectives, learners' abilities and students' entering behavior is also dependent of those selection of methodologies and technicalities. The process of how to teach is a set function. In this function, teacher acts as an "instructional manager". The activity of learning is organized by teacher. In order to grasp learning, teacher establishes a suitable, advantageous environment and an environment that seeks motivation. It also results in transformation of students in their behavior in order to attain previously planned objectives. Panda and Mohanty (2003) are of the view that the position of a teacher in an educational setting is just as that of a backbone in human body. They were of the opinion that the role of teacher is that of an authoritarian. It is not easy

to miscalculate and evade his position in the ongoing procedure of instruction and erudition.

The act of instruction and of learning has direct relationship, as these are synthesized. Measuring of effective and good teaching is, in fact, the matter of measuring of the extent of students' learning. Jarvis (2012) threw light on the process of teaching. In his view point, teaching is an activity that is internal of a person. It is time taking and this is matter of experience that makes a teacher an expert. In his view point, these teachers are actually fully accomplished store of facts, ideas and information regarding specified scenario during teaching. These comprises of information regarding the subject he teaches, commonly used teaching methods and methodology, un ambiguity about subject that he teaches, plan for learning, material of program of study and finally chasing the objectives of education.

To attain and accomplished the process of learning successfully and efficiently, teacher should have the ability to show the information in an influencing way, in order to amplify and enhance the quality of substance that is learned and to sustain the learner to perform as influencing learner (Petty, 2009). Torrington et al. (2000) illuminated that teaching is a detailed and unambiguous state of affair that is set and interpreted. Teaching consists of a chain of activities. By using these activities, learners put their efforts to surmount the complications which they have to face in their learning. Lakshmi (2004) defined that along with science, teaching is a skill and an ability. She also states that in order to improve their teaching, a good teacher mostly puts his/her efforts to explore

novel influential techniques which results in improvement of the learner's learning (2004).

Teachers' role of controlling and giving guidance influences learner's academic performance. Teachers' transforming knowledge is highly effecting students' comprehension of substance. Grouws and Cebulla (2000) argue that the good influences of effective teaching are spoken that it should preserve learning, highest withholding and rapid chances that the concept will be utilized in novel situation. Indispensable objectives of instructional strategies of teacher build up learners' theoretical clarification of ideas. This will be resultant in good presentation of technical and practical knowledge aftermath. Learning to teach is an ongoing progression. Teachers have main focuses on maintaining disciplinary situation, motivating students and examining and analyzing students' success and adopting a range of instructional techniques.

Smith et al. (2002) defined that the role of teacher is a necessary element of teaching. So, it is vital for him to be an expert in what he should teach (substance/matter) and in what way he should teach. Teachers apply a number of teaching methods in order to teach specified subject matter. Darling-Hammond (2008) identifies a few steps adopted by the teacher for the betterment of their teaching. These will be helpful in learning process as well. In his view teacher should;

- i. Construct determined, striving and significant handing over for the duration of classroom learning.
- ii. Keep learner busy in those task which endorse and encourage learning.
- iii. Establish a relationship to learner's previous information.

- iv. In order to get good learning, seek for a proper centre.
- v. Evaluate learning of students endlessly and constantly.
- vi. To enhance learning of their students, teacher should give a reflection over situation.
- vii. Back up students to keep inventiveness and tremendous logical skills.

One of the major concern of teaching is that it causes an advantageous and enviable altering in behavior of the teacher. It is brought about the teacher using teaching techniques to achieve his objectives. Effective teaching is the process of transferring of knowledge more effectively in the short time to achieve the maximum learning outcomes. Influential instructional strategies demand in setting complicated, moral and ethical options, working out vigilant findings and glorification of the complicated sense of the educational aims. Along with keeping the technical knowledge and skills, teacher utilizing in their routine exercise, the teacher should also have an insight of the moral magnitude of their livelihood (Good, Wiley, Florez, 2009). An effective teaching can play pivotal role in increasing the skill and knowledge. Smith (2003) has described main features of effective teaching.

- 1. A teacher's eagerness and interest for the subject.
- 2. Bond between a teacher and a student or group of students while making decision in matter of classroom whether existing in or out of class.
- 3. Teachers' rational confrontation or dare.
- 4. Showing logical, critical and theoretical and intangible awareness of beliefs.

Goody (2003) identified the principles of effective teaching as;

- 1. Effective teaching generates a 'learning community'
- 2. Effective teaching promotes active learning
- 3. Effective teaching produces effective feedback.

Effective teaching promotes actual and exact facts, ideas and information into valuable knowledge. This brought clear meaning s in advancing proficiency in field of knowledge. In Pakistan, there are numerous teaching methods that are utilized at higher level to handle a variety of subjects.

## 2.2 TEACHING STYLES

In view of Grasha(as cited Mehmood and Sheikh, 2014) teaching style is the meticulous and scrupulous manner of teaching which teacher adopt whilst teaching students. It is very significant and useful for teachers. Exacting manners in which teacher presents information to learner are the teaching styles. Teaching styles is not only the matter of increasing techniques are in trusting mannerism. In addition to this, it keeps inheritance and the teacher personal traits and in what ways, this persuaded the manner teacher chosen guiding techniques.

Brown (2003), illuminated that way of transferring knowledge are the reflection of the beliefs a trainer adopts regarding students performance in the transformation that take place in the classroom. A large number of teachers adopt the exact pattern of teaching strategies in which they are thinking about something. A teacher, who is effected highly by thinking in an environment that was teacher centre, depend upon lecture method. Teacher clearly and comprehensively adopt instructional strategies functioning of which is good.

The question arises here that is it possible for a teacher to amplify their ideas about teaching and teaching methods. Heimlich & Norland (2000) argued that there lies a vital and imperative situation before teacher can endeavor to adopt their styles. The way of selection of teaching strategies of the educators and techniques of teaching plays a role of their concepts and norms relating to the strategies that could be amended to provide the meaningful and influencing conclusion the common and wide-spread belief presentation of the teacher. It is up to the teacher to adopt teaching strategies. Phenomenon of teaching should be apparent in him/her (Brown, 2003).

Galbraith (2004) illustrated that trainer should possess fluency regarding various fields. Teacher should possess an individual's characteristics that presents a concept of caring trust And real and legitimate apprehension for the individual. In his view point a teacher should possess fluency regarding these three specified field of knowledge. Firstly, specifically related to the instruction, a teacher should have information regarding the substance. Secondly, he surely poses knowledge about students. Thirdly, all the knowledge relating to ways of transferring knowledge and instructional strategies. This is essential to all teachers that he must possess his own philosophy regarding edification and instructional plan as this aid him to organize in selection of instructional substance. These ideas regarding the way of teaching, gaining knowledge and the reason of gaining knowledge of apprentices establish a fundamental steps for the strong effect of learning.

The clarity of learning content and the purpose of learning is also making basis for effective learning(Zinn,1999).

Teaching Style is a matter of teachers' inclination to present the information. Teacher adopts his preferred learning style through practice. Such practices of teacher prevailed during classroom situation. So that there may be advancement in group activities and realities of the teacher are most important factors of edification procedure in the class. Like that way teacher is considered to be wholly solely person in his teaching process and entrusting students' academic achievement which leads by students' achievement motivation. To transform and amend educational setting in such a way that keeps a linkage among student learning style and teacher teaching style, is the need of the hour. A very good students' academic performance can be achieved in this way (Gilakjani, 2012).

An investigation by Reid (1999) showed that every teachers possess his/her own teaching style. He explored that almost 90 % teaching at stage of secondary schooling are aural and hearing learner that is auditory learner. The situation expresses that mostly teachers at secondary schooling stage implement addressing and dialogue way of instructional. Similarly, there are following different approaches about teaching styles;

- 1. Felder-Silverman Interpretation of Teaching Style
- 2. Pratt's Idea on Teaching Style
- 3. Den Benzie Teaching Style Interpretation
- 4. Grasha' Impression about Teaching

#### 2.2.1 Felder-Silverman Interpretation of Teaching Styles

As Felder (cited by Fida, A. & Ghaffar, A., 2015) perceived way of gaining knowledge, they formulate five queries relating to instructional way of teachers. In response to such like that queries, Felder-Silverman found an exposure that instructional way of the trainer can be resolute.

- i. Teacher high lightened what sort of knowledge?
- ii. In presenting the substance what approach or style may be adopted by teacher?
- iii. In which form or mode teacher arranged and expresses the lesson?
- iv. How the lesson presents so that it may be influential and beneficial for students?
- v. What is the mode of presenting knowledge to students and how it could be done?

In an attempt to answer this question, there is description of teachers teaching styles. The emphasis of teacher is on real and conceptual knowledge. The way of presenting knowledge emphasis visual modalities with the help of lecture, reading and discussion. In order to manipulate knowledge presentation is done from general to concrete manner. Deductive approach of presenting knowledge is adopted. Teacher preferred that students should play actively in teaching and learning process. Discussion and practical activities are fitted for it. It is the top priority of teacher to present the material, in chronological way. It is also priority of teachers to expose general happening in its amalgamation. Felder sketch out numerous techniques applied by teachers. Here, teacher addresses all learners' requirements and complications faced in the classroom. These techniques are;

- i. Motivation of students is necessary in the sense that they relate their teaching with that student have already learn or they knew about something.
- ii. It is essential for teacher to deliver factual and true knowledge to the learners.Intangible framework should also deliver to the learner.
- iii. In order to make his lesson attractive and influential teacher should add the usage of audio visual aids in their teaching
- iv. To analyze students learning outcomes situation it is imperative for teachers to spare plenty of time.
- v. Teachers should that learner possess a wider range of chances to do something actively besides notes taking.
- vi. In order to attain good outcomes of the edification setting, trainer should provide psychomotor practices to students.
- vii. Teachers should discuss with their students regarding their ways of gaining knowledge.

## 2.2.1 Pratt's Idea on Teaching Style

Pratt (2002) described strategies of teachers' teaching style in five meaningful aspects. These strategies lies in a quantum ranging from paying attention to teacher center and to learner center. Applying these techniques is captured by a distinctive instructional way of transferring knowledge. These strategies comprises of:

**2.2.2.1 Transmission;** Attention of teacher is on substance. It investigates that what kind of material student may opt to learn and in which manner they may opt to learn.

- **2.2.2.2 Developmental;** What learner has already learned is most countable? This aspect of teaching techniques described that the main objective of teacher is to inculcate and enhance art of resolving issues and argumentation.
- **2.2.2.3 Apprenticeship;** While adopting his strategy teacher gives a bona fide assignment to the students that grows in an atmosphere of truly working.
- **2.2.2.4** Nurturing; In this strategy the main focus of teacher is on those inborn traits of students that require enhancement and upbringing. One of the main characteristic of this strategy is learners listening skill. Teacher should also be aware of and familiar with cognitive and emotional needs regardless of student learning.
- **2.2.2.5 Social Reforms;** In regarding this perception, the trainer connects facts unambiguously with the living of the learner. Main feature of an influencing trainer and giving consideration to certain strategy is to utilize a plenty of styles in order to synthesize and assimilated way as all top learning priorities are kept under observation.

## 2.2.2.6 Dan Benzie Teaching Styles Interpretation

Benzie investigated a way of gaining knowledge. It was mainly exercised by trainers' instructing medical students. However, this instructional way of transfer of knowledge is an interpretation of teacher of any perspective. Benzie this idea of way of transfer of knowledge works on a string, consisting of four primary ways of teachers' teaching. The feature of all of these ranges from focusing on teacher centre whilst it becomes the learner focused approaching to right hand of the string. The given framework regarding teacher centered instruction style shows that, on the most left-hand side of the string, there is assertive approach, which strengthen teachers information. He gives instruction to the students and holds questioning session with them. So, in this way this style have its roots in lecture method of teaching, in which teacher play his role actively and students are passive learner. On the other hand, in suggestive framework of this teaching style, teacher gives suggestion to finds alternates for solving certain problems of students (Dasari, 2006).

#### 2.2.3 Grasha Impression teacher way of teaching

Grasha (2002) opines that a specified manner in which knowledge is presented to learner in the classroom is referred as a teaching style. It is also the display of these belief and ideas of teacher that he presents during the period of teaching in the classroom. Grasha follow a line of investigation on engineering college students. It exposed that stylistic characteristic of teachers are described in various ways. These stylistic characteristics of teachers are presented as;

#### 2.2.3.1 Formal authority

In this teaching style, teacher straightens the path for the students and arrange tasks that performed in such a way that are accepted by everyone. Those teachers have a specific position among other teachers who are handling within this approach of teaching styles. Teacher is considered as an expert and a person having arranged expectations and rule of conduct. Teacher with the characteristics of this teaching styles gives students such structure that is essential and imperative for learner in their learning.

#### 2.2.3.2 Expert

This style depicts that teachers' role is of an expertise, who possess all the knowledge that is essential for students. The main benefit of this teaching styles lies in the sense that teacher is highly qualified figure regarding a knowledge bases technique.

## 2.2.3.3 Facilitator

In this style of teaching, role of teacher is of a facilitator. As a facilitator, only teacher gives assistance to students. In order to hold a questioning session, teacher gives options to students. The significance of this teaching style is that, in this style teacher perform as a facilitator. The main concern framework of teaching style is to produce in students' ability of thinking and performing independently. This approach takes into account the student's need and goals. This style of teaching also gives chance to students the creativeness of intellect.

## 2.2.3.4 Delegator

In this framework of teaching style, students' perform in an independent way or an autonomous group having the help of teacher as a resource figure. Another benefit of this framework of teaching style is that it develops on sense of independence and freedom in students. They put themselves on higher position and leader of their learning in their imaginations. Somehow, it will not beneficial in the sense that teacher fails to understand about the willingness of students to perform in an independent way and this will be the cause of creating anxiety.

#### 2.2.3.5 Personal model

In this teaching style, teacher seemed as an exemplary figure. The main focus of teacher is to promote students observing, copying and analyzing his ways of handling things. Its noticeable benefit is that its main concern is observing, imitating and copying exemplary figure. The drawback of this style of teaching appearing when teacher force to follow his way as he is one and only figure to be followed in teaching and learning process. In this scenario, students do not feel comfortable and easy and frustration starting prevailing in the minds of students when there is not positive relationship students do not fulfill teachers' expectation or quality enhancement standard.

## 2.3 LEARNING

Learning is extremely essential characteristic of human being. It is a continuous process occurs throughout in life. Learning takes place during all the process of human life-time. Learning is described as alteration in behavior of individual that take place when individual is experiencing something. Fatigue, tranquilizers or depression may also be the cause in changing behavior of any individual. But change depicts permanently. Learning took place in the form of change of behavior in permanently through continuous experience. This change can be evident in the behavior of a person. These changes may comprise of complicated cognitive or attitudinal change that effect behavior of the individual (Ormrod, 2008).Parson (2001) explored that learning is the act of getting information about facts, ideas and belief. In his view learning is an everlasting changing in human behavior. It is also moderately changing of behavior permanently that is

resultant of practice or experience. According to this description it is obvious that the learning is:

- 1. Changing of behavior (better or worse)
- 2. Happening of it is through exercise.
- 3. Moderately enduring by temperament.

Hence, erudition creates a never ever ending modification either it is negative, or it is positive through experience. Learning comprises of cognitive and emotional effects and experiences for seeking and improving. Environment also have great effects on erudition. It modifies an individual's information, values, abilities and ideas about whole globe (Illeris, 2000). One of the most attention seeking condition prevails is the kind of learning which should be facilitated. It is helpful for teacher to have awareness about kind of learning in order to perform his job in a tremendous way. The primarily discussed work in the learning is Benjamin Bloom's three domains. Bloom's taxonomy regarding the domains of learning generated by Benjamin Bloom andit elaborates that are three stages of learning (Anderson, Krathwohl& Bloom, 2001).

# Description

## Domain

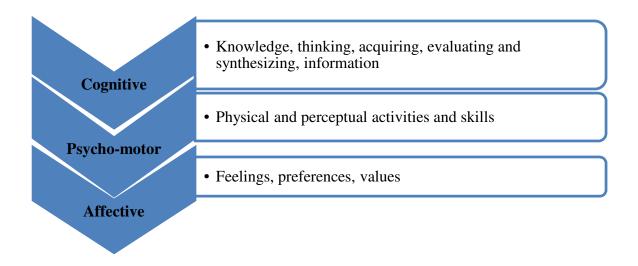


Figure 2.1: Domain of Learning

1. Cognitive domain: It is related to the fact, belief and ideas of a person or it is based on mind. Bloom stated that cognitive domain is actually comprised of objectives. These objectives handle the recalling or recognizing of the knowledge. It also handles the upbringing of mind related capabilities and arts. Intellectual learning is set of the mental processes. These may range from memorization to the ability to think and solve problem. There are three practical instructional level in this domain, which includes ideas, comprehending and implementation. This style of concept of fact is single. It deals with the action like describe, recognize and enlist. The comprehending stage takes two or more than two facts altogether. Typically, this stage comprises of actions like describing, comparing and contrasting thing.

- 2. Affective domain: Bloom Taxonomy stated the psychomotor domain as including objectives. In their opinion these objectives are to emphasize on feeling tone, sentiments, or what the extent of accepting or rejecting things is. The roots of affective domain are in the dimensions of behavior and these are referred as beliefs. This domain comprises of three stages, including knowing, distinction and synthesize. These levels are mostly restricted to the tasks such as depict, show, exhibit, display and give approval. The first two levels are intellectual, synthesizing is behavior related. It is the requirement of the learner to analyze and combine things. In this stage discussion is occupying a central position. The first two level of this domain are intellectual, whereas the requirement of this level is an affective inventory type.
- **3. Psychomotor domain:** The psychomotor stage of learning can be described as including behavior, the main focus of which is on neuromuscular or physical skills. This stage comprises of various extents at which physical dexterity lie. Occasionally, these are called "perceptual-motor skills". Psychomotor learning involves muscular activity and muscular assemble of acts. The core of psychomotor domain is skill; the sense that student can develop a product. Three levels in this stage involve copying, exercise and habitual activity (Huitt, 2011).

By summing up all this it is obvious that individual receive information by his mental capabilities. Individuals may apply physical skills & human mind is related to his/her aesthetic senses.

# 2.4 LEARNING THEORIES

Learning theory is the effort that made description of the way in which people learn. The learning theories were generated by the concepts of the human nature. In the viewpoint of Hill (2002) there are two chief values of learning theories. One of these values provide us with vocabulary. It also provides us a theoretical framework in order to interpret the examples of learning to which are output of our observation. The other value suggests us that from where to finds out the solution of practical problems. The functioning of these theories is not only providing us the solutions of the problems, but they also attract us towards those factors that are counting in searching explanations and atmosphere. It also seeks for the pupil's idea about field. Learning theories may be categorized as Behavioral school of thought and Cognitive school of thought. Constructivism also includes in these approaches of learning. Main focus of behaviorism observing the dimensions of learning. Cognitive theory throws light on is intellectual/cognitive learning. Whereas constructivism explains learning to up bring or establishes novelty of facts and ideas (DiGiuseppe, David &Venezia, 2016). Educational psychologists have exhibited various theories about the explanation of the way of learning of individual. Some of significant conceptual frameworks are;

## 2.4.1 Sensory Stimulation Theory

It shed light on the occurrence of erudition as a result of movement of sensations. In order to acquire novelty of knowledge, various senses are utilized by human. The function of sense of seeing and hearing is comparatively more important in acquiring knowledge instead of other senses. In views of Laird (As cited Cook, 2005), sense of vision has pivotal function in learning process in spite of other senses. An individual receives about 75% knowledge through the sense of seeing. Another significant and effective sense in knowledge acquisition is listening.

Share of additional senses like touching, smelling and tasting is a percentage of 12 in the reception of novelty of knowledge. We can enhance learning in fluently when our senses are stimulated. It is affirmed by the associates of this theoretical framework that when stimulation of different senses occurs, it will be the cause of tremendous learning. Various cues are applied in order to stimulate our senses. Colors, volume, extent, strong statements, ideas and belief that are presented in visual form etc, are some of the cues that results in the stimulation of our senses to enhance learning.

### 2.4.2 Behavioral Learning Theory

Behaviorists possess this psychosomatic theory, noticeably from B.F. Skinner (Bouton, 2004). In viewpoint of Skinner, behaviors are resultants of actions or tasks. If reinforcement is given positively desirous behavior may be the parts of learner's personality and he may adopt this behavior time and again. Reinforcement used positively becomes a more powerful tool when reward or word of appreciation are given to learner. In similar way when negative reinforcement is applied, it is also powerful force in order to stop or distracted negative situation that may results in situation that may results in shaping behavior. One of the major form of reinforcement that is applied negatively is punishment. It weakens to shape a behavior that develops in negative situation. The reinforcement of negative nature distracts the individual not to make that behavior the part of the personality and adopt it time and again. In view point of behaviorism the role of learning is acquiring the novelty of behavior with the help of conditioning. Conditioning take place when individual is in contact with the environment. They are of the view point that our behavior is the resultant of our respond to environmental stimulation. Somebody can judge and analyze through observation and in an orderly manner. Conditioning takes place into two forms;

### 2.4.2.1 Classical conditioning

Classical type of conditioning comprises of a behavior that occurs as a reflex action to stimulus. In order to train behavior, this technique is commonly used. In this conditioning, responses that took place naturally are interrelated with a response. An association is established between neutral stimulus and that of unsurprisingly taken placed spur. Therefore, the unbiased spur that happens previously becomes inducing the returning action besides the existing of the stimulus that take place naturally(Myers &David, 2008).

## 2.4.2.2 Operant conditioning

One of the idea of learning is operant conditioning. In operant conditioning a correlation between behavior and that of the resultant of behavior is established. Two forms of behavior take place. One of the form of behavior results as reinforcement. This upbringing of the behavior took place time and again. Other result is in the shape of punishment. It distract the individual to adopt that behavior time and again. By summing

up, we can say that in the situation of operant conditioning we are aware of the association between an action(response) and in its penalty that attract the individual to adopt good results and distract the individual to adopt bad results(Myers &David, 2008).

### 2.4.3 Cognitive Learning Theory

The foundation of erudition of Cognition lied on Gestalt psychology. Gestalt is a German word stands for "Whole". The major attention of this theory is on the idea that learning takes place in the form of whole in spite of separate parts. This theoretical framework elaborates part of alive intellectual procedure in learning (Kruse, 2009). Focus of this theory is on the ways learners adopt for the purpose of gaining novel ideas and formulating clarity in it. Cognitive learning theory established a fact that all the human seek so many requirement and consideration at different passage of time. He further states that possess subjective association in different substance, Gestalt psychology focus on demonstrating the idea and elaborate rules in order to exhibits that in what manner someone arrange the sensory system to discernment (DiGiuseppe, David &Venezia, 2016).

The Gestalt theory of psychologist high lightened that there are two essential suppositions. Firstly, this is supposition that system of memory that comprises of a functioning and arranged process of information. This theory does not take into account the human behavior. In fact, their focus is on the way of working off human memory in order to enhance learning. Believer of Gestalt learning theory perceive learning as internal intellectual process which includes understanding and awareness of information processing memory and perceiving things. In view of Gestalt psychologists the position of learner is significant as compare to the environment. This theoretical framework focus is on explaining different ideas and concepts such that position attaining socially, intellect and recall in accordance with growing old (Paisal, 2019).

# 2.4.4 Constructivist Theory of Learning

Jean Piaget and Jerome Burner display theory of learning. The main focus of the follower of this theory is on the active participation of learner. They stress on the construction of knowledge, build up novelty of facts or beliefs that depend on recent knowledge and old experience. Constructivists argue that in what way learner perceive the ideas and information that they keep with them previously in order to combined and joined and adjust the novel knowledge and experiences into conceptual (Salavin, 2003).

The question arises here that what is the reason that students do not learn in effective way when they listen to teacher or they may read something from a textbook. In the view of constructivist school of thought students came in the classroom with such a mindset that they build to establish sagacity regarding their complete life for the purpose of making the sagacity regarding experience.

By all this discussion we reach to a conclusion that by different learning theories, individuals chose their way of learning. All these theories are applicable varying to situation, need and choice.

# 2.5 CONCEPT OF LEARNING STYLE

Usually "style" is an idea or terminology that prevails about the scenario of media, sports or fashion world. What individual preferred is the core of style. When a person has meticulous way of dressing up or has a special cutting of hair, it may be associated as "his unique way". When the idea of unique way is utilized in educational setting for erudition progression, then it means a certain aspect in which knowledge is gained and processed. The way of erudition adopted by learner may be describes the way in which learner reacts towards novel information and process it. It is the set in which individual indulge to take information and knowledge in learning(Reid, as cited Chick, 2010). Every individual have a special and exact manner of learning that is reformed as specified learning style. Actually these are the individual differences which may be the major cause of the creation and up-bringing of learning style. Such diversities of person (personality traits, intellect, discernment, capability and so on.) are deeply affecting the manners in which students learn and stimulated along with their attitude (Yazici, 2016).

Individual differences are the most influencing components for the effectiveness of educational setting. Leaning style is the matter of the way of learner's thinking about whatever is around him. This also takes into account learners reaction and familiarity in the learning process. Erudition is the manner through which individual perceive environment. This is his utilization of the information. Furthermore, he categorizes way of erudition in four patterns. Firstly, there are imaginative pupil. Then there are analytic pupil. Thirdly there exist common sense pupil and lastly, there is a form of dynamic pupil (Eden & Altun, 2006). On discussing all this we reached to a definition of way of erudition. Way of erudition is a unique mode adopted by learner in order to gain and preserve novel information in a erudition setting. The concept and idea of learning style is generated in the 1970s and it takes its noticeable recognition. Learning style has no concise definition on which all of the educationists are agreed upon. Different explorers have elaborated it in diverse manners. Somehow, it is accepted by all explorer that learning style is the matter of the way learner preferred knowledge in learning settings (Riener &Willingham, 2010).

In views of Kaplan and Kies, learning style is an innate component of the person, that proved the base for earning individual instinctive characteristic that proved the bases for learning and it easy to alter it through ones' life, but it is possible to alter and enhance it with the help of experiences. Learning style is a wider idea that exhibits individual diversities on account of their perception of information and processing it (Pashler, McDaniel, Rohrer & Bjork, 2008). Learning styles are based on learning approaches. People apply these learning approaches in order to systematize and progression of knowledge to solve issues coping while performing in learning assignment. Feldman (2004) described that learning styles are the reflection of seeking, applying and thinking of information. The main focus of learning is about what type of information people gain and retain in diverse manners. All people have their own strategies to cope the situation. Felder (2005) described that there are various classification of learning styles. The main focus is on plenty of knowledge and then their tendency to operate on gained knowledge in various manners. There are different learning styles and this situation of differing from person to person proved very imperative in the educational field (Canavan, 2004).

It was perceived that learning styles ate based on a person's inheritance. These learning styles are linked with previous experiences of life of person that have no importance in learning. Yoder (as cited Pashler, McDaniel, Rohrer & Bjork, 2008) described that it is important for educators to have knowledge of individuals' differences. The learning approach helps the learner to test their amount of learning in milieu where their experiences of education are directed towards their specific way of learning. It is evident from different line of investigation that learner's perception enhanced when their importance is given to their learning styles. It is an admitted fact that there is diversity in learning of individuals. This concept eminence on the prehistoric Greeks. Trainers took notice of a number of learner have specific preferred ways to learn as compare to others. This behavior of learner is baptized as learning styles. This formulated to a learner's specific priority for learning. These learning styles help teachers to plan diminutive group and individual based direction (Sternberg, Grigorenko, Zhang, 2008).

According to Grasha (2002) learning styles are an individual's personal characteristics that affect a learner's capability to seek knowledge, make interaction with other fellows and teachers along with participation in learning experiences. In view point of Reiff as cites by Kang (1999) it is apparent that biological and psychological diversities push individuals to learn in different ways and with different rapidity. According to Brown (2000) it seemed that wide-ranging propensities are exhibited by people. But these diversities in contextual settings induce diversities of ways in the same organism. Educators can perform best strengthening the learning process by keeping the information of the diversities of learning style among mess of learners. In fact, there are plenty of ways of teaching as well as learning. He is of the view that it is important to

keep the knowledge that the way of perceiving of all people is not the same. In learning they have to face many questions that arise as how, when, where and in what ways should be adopted to learn. All these questions cause the establishment of different preferences in learning. Learning style exhibited as different theories of manners of learning that comprises of educational methodologies, especially for the persons who are assumed to permit the person to learn in a good manner. It is an admitted fact that individuals like some specified way of interaction in order to receive information and process stimuli or knowledge (Riener & Willingham, 2010).

According to Kalsbeek (As cited by Fida & Ghaffar, 2015) learning styles can be considered as an individual's preferred way to process information, concept an information and taking decision. Learning styles are also considered as the matter of behavior and interest that effects whatever is adopted in learning scenario. Summing up all these, ways of erudition referred as the manner with the help of whom personage make perception and respond to any knowledge existing in specified learning scene.

## 2.6 THEORIES OF LEARNING STYLES

Different psychologist proposed different learning style, such as

- 1. Onion Model
- 2. Dunn and Dunn Model
- 3. Social Interaction Model
- 4. Information Processing Model
- 5. VAK learning model

### 6. General Multiple Intelligence Theory

## 2.6.1 Onion Model

Heredity upbringing and current environment play important function in erudition. Newer approaches that are based on cognitive psychology and those approaches have consideration regarding communal, cultural and developmental components have been superseded from the influence of the conventional approaches that are concerned with stimulus response view of behavior. In 1983, Curry offered and well thought-out the approaches in three levels. These levels are resembling to the three layers of an onion. It is known as the Onion Model. The outer layer explains for the personage priorities. These are the priorities that a living organism confronts in their surroundings where process of erudition occurs. This model contains a middle layer middle layer. This middle layer includes approaches which focus on diversities and variation in processing of knowledge. The inner most layer account for theories that highlights on the cognitive and personality traits of the individual difference.

Onion model was extended in (1987) by Claxton and Murrells into four levels. They exposed that characteristics exhibited on diverse degrees are self-contained unit. Traits at the outer are more stable and rarely changes. The inner level starts affect the outer levels most as we move from inner to outer level (David & Alice, 2013). One's information processing abilities is effected by personality and the capability to process knowledge influence individual communal interaction but individual's these styles of public communication effect their priorities of edification different psychologist proposed different learning styles mode.

#### 2.7 INSTRUCTIONAL PROCESSING MODEL

It represent the most external layering of onion's model which is attention seeking and it is taken that they are not so much strengthened. Moreover learning, learning environment, teachers' expectations and other external factors are most influential. Famous models are as follows.

#### 2.7.1 Dunn and Dunn's Model

Dunn (As cited Metz, Boling, De Vore, Holladay, Liao, &Vlutch, 2019) was strictly adhere to the idea that the manners of a person's perception and progression of knowledge are various. Abilities, attributes, stimulation and learning styles of learners are at varying degrees. So, many lines of investigation explored that students' performance is affected by the differing learning styles. Learning styles can be measured through various methods. Dunn & Dunn (As cited Dunn, 2007) explained the main model of instructional and environmental preferences, who said, manner is reflected in learning styles. It is also of the opinion that these manners are exhibited in individual's capabilities of perceiving, interacting and responding to the learning environment. A first stimulus is learner's environment. For instance one learning group may be affected by temperature, sound, light and seating arrangement style while other group may prefer cool environment. Some may learn better in peaceful situation whereas, others cannot pay attention unless they hear music. A second stimulus is learner's emotional state. Learners may be affected more by stimulation, determination, task and structure. For instance some people can fulfill one task at one time while others prefer to do plenty of assignments at the same time. A third stimulus is learner's physiology. These set contains component that are

perceptual (auditory, visual, tactic and kinesthetic), times (morning, evening) mobility (sitting or moving while studying) and intake (eating or drinking while studding). Some people work better when drinking tea during study while others learn better during walk in their room. A fourth stimulus is learner's psychology. Learners of this set are pertaining to psychological processing (global or analytical, impulsive or reflective). They are also concerned with action and atmospheric orientation. A fifth stimulus is learner's Sociology. A learner of this set exhibits in what way organism gain knowledge in collaboration with other people, with a commanding figure or a companion. Some people lean in group study while others learn more while alone (Dunn, 2007).

## 2.7.2 Social Interaction Model

Another layering of onion representation comprises of communalinterface mode. It explains that in what manner social settings and interpersonal contexts after the strategies learner will utilize to obtain information. Anthony Grasha (2002) identified six learning styles among students. This is independent learner, dependent learner, avoidant learner, participant learner, competitive learner and collaborative learner. Marcia Baxter-Magolda (1992) enhanced belief of William Perry. She found that individuals are comfortable in considering their growing old and category of sex along with the communal expectations of the environment during learning. She categories learner into four types. Firstly, there is absolute knower. Secondly there lies transitional knower. Third type of it is independent knower and lastly there is contextual knower.

#### 2.8 INFORMATION PROCESSING MODEL

Secondly there is layer that explains the way interacting and engaging with communal world. It is the reflection of the ways of personage's collection, sorting, storing and utilizing knowledge Leading approaches of this layering are as follows.

## 2.8.1 David Kolb's Learning Model.

David Ko1b (As cited David & Alice, 2013) worked over his model for a long time and developed by his experiential erudition approach and his ways of erudition record. Ko1b was impressed by prior psychologist Piaget. Kolb presented his erudition representation and exalted that the way in which individual perceives and organizes knowledge are different. His representation is amongst the theoretical standpoint that is implemented for the exploration of learning style. This model has been frequently utilized in teaching and learning process (Cano-Garcia & Hughes, 2000).

Gregorc was another person who worked on learning. He proposed that the manner in which people opt to organizing space and time cause the differences in them. It is apparent that everyone has different capabilities of meditating. These capabilities are perception(manner of observing information)and ordering (manner of arranging, synthesizing and depositing of information). According to him, there are two types of features of advantages of perceiving things, one is abstractness and other is concreteness or in other words complexity and simple way of ideas exist there. Furthermore, ordering has two qualities. One is sequential while other is randomization. These features and qualities comprise of providing four learning styles (Bohn, Rasmussen, & Schmidt, 2004).These learning styles are tangible sequential learning style, tangible casual learners' learning style. Intangible sequential learning style and intangible casual learning. Learning is perceived as a procedure in which information is generated through the conversion of practice. Ko1b learning mode is the formulation of the implementation of four major learning capabilities. These are the abilities implemented by an individual to perceive and arrange information. These learning capabilities are;

- i. Concrete Experience (CE). Tangible practice. Learning through act (such that sensation, tenderness, viewing and in audible range)whilst other are good perception of knowledge intangibly (utilizing cognitive and visionary concepts).
- ii. Reflective Observation (RO)-Erudition by observing and reflecting.
- iii. Abstract Conceptualization (AC)-to create ideas and belief by thinking and reflecting
- iv. Active Experimentation (AE)-set to verify novel ideas through acting and practicing.
- **2.8.1.1** Accommodators learners; This erudition styles specified in the characteristics Concrete Experience (ICE) and Active experimentation (AE) Individual having such learning style use simple and solid experience in order to perceive information. He also use preference and demonstration in experiment in order to organize these information. These learners learn effectively through acting, performing and feeling (Asker &Akkoyunia, 1993). Accommodator learners are in favor of experiencing novelty of things in a set and arranged working environment. These learners have flexibility. Accommodators act efficiently in

group. These learners are in favor of participating in some novel experiencing situations. They do practice in order to obtain goals. These learners feel free with laboratory work. One of the tremendous characteristics of accommodating way of erudition is a functioning management and coverage in facing risks.

- **2.8.1.2 Diverges learner**; Diverges way of erudition specialize in working with solid experience and thinking over observation. These learner work by experiencing in perceiving novel ideas and organizing new information. People adopting learning style have the ability of handling solid situation in different ways. The diverge learners are comfortable in producing many facts in a broad spectrum with the help of different method like, brain storming. Diverges learner keep plenty of knowledge regarding civilization and art. It is assuming them to collect information. Diverges learner are happy in teams and feel comfortable in working with people. They destining the information and knowledge of others. They love their own investigatory studies. People with this type of learning style possess the capability of understanding so many problems when they are paying attention to their self-experience. They have the power and ability to handle novel ideas in effective manner and perspective. Diverges learner have great sense of creativity. They have ability to understand the nature of the problems and enhance general content of brainstorming others(David & Alice, 2013).
- **2.8.1.3 Assimilator learner;** Individuals with this type of assimilator learners have the characteristics abstract conceptualization (AC) and reflective observation (RO). Assimilator learns resort to solid framework in receiving knowledge. People who are assimilator in their learning have the ability to understand and transmit

elaborated knowledge in a long term significant whole. Such learners give immense weight age to the logic of theoretical framework. These learner give less importance to the practical value of theory. Assimilator learns are good planners and they have creative mind. They describe issues, theory and facts. These type of learners get an extensive series of information and arrange it lucidly and logically. These learners are comfortable with the use of illustrations, oral lesson and academic papers to understand and comprehend new information. Main focus of assimilator style of learner is to carry weight age to facts and ideas. These learners are not so much interested in group. With the help of practice and systematized knowledge, it is possible to build up the capabilities of such type of learners. These learners create ideological modes and verifying theories and facts by experiencing. They work on quantitative statistical examination (Kolb, 2004).

2.8.1.4 Convergent leaner; Convergent apprentices use nonfigurative conceptualization in taking knowledge and achieve testing for processing and shaping knowledge. These learners do exercise in order to take benefit of ideas and theories. These learners are in favor of handling tasks or issues. Convergent learner do not bother about relationship with people. These learners utilize their psychomotor skills in order to verify testing tools in real situation to check its functioning. They give importance to theory and implement it practically to find the solution of issues (David & Alice, 2013). This representation of ways of erudition by David Kolb comprises of four models of erudition manners. An individual learner may possess blend of ways of erudition. But it is fact that one style is more dominant as compared to others (Kolb, 2004).

# 2.8.2 VAK Learning Style Model

Among many other models used for the explanation of student's performance, VAK (Visual, Auditory, kinesthetic) model of learning style is commonly and extensively adopted type of learning style. The root of this model lies in the 1920. The progression of VAK learning style model became the source of seeking attention widely in order to examine students' priorities regarding learning. In the view of Dunn & Dunn (A cited Dunn, 2007) majority of school students give preference to receive information by their auditory senses. It is second priority of the learner to learn through kinesthetic sense whereas, visual learning style is less dominant. He found that VAK learning style model has remarkable relationship with students' academic performance.

Students' differences draw a line of distinction to various styles of their learning. It carry great weight age for teachers to determine students' differences regarding their learning styles. When teacher have the knowledge of students' preferences, it will be valuable and helpful for teachers to be careful in his/her handling of students' differences with which students came to the classroom(Felder &Spurlin, 2005).

In view point of Fleming (2009) visual learner preferred to obtain knowledge of sighting(think in photos; visually supported material like aids such as transparency or visually projected slides, figures diagrams, hands out and so on). Auditory learner are comfortable in erudition with the help of listening (address, dialogues, tape and so

on).Kinesthetic learner have preference for experiencing, stirring, tendering and acting (having an energetic exposure of the surroundings; scientific project; experimentations).

In the view of research presented by Barbe & Milone (As cited Abbas, 2011), it is apparent that effective learning takes place when students utilize their sense of vision. Knowledge can retain long lastly when visual aid like charts, cards or maps are shown to students. In their viewpoint VAK learning style model is of the most imperative interpreter of students' preferred learning style.

Prices, Dunn & Sanders (As cited Gulnaz, Farooq & Ali, 2018) investigated that child of every age opt to use kinesthetic learning style. In his view point, visionary power enhanced gradually through elementary grades. He found that only young children of grade five or grade six are able to learn knowledge and make their knowledge lastly by the use of aural sense. On these grounds Rajshree (2011) established a study in Nagpur. Findings of this line of investigation exposed that nearly every students' preference inclined towards kinesthetic learning style. Further, investigation showed that this learning style is highly correlated with that of students' academic achievement. Learners can be divided in to three styles. First one is visual learner. Second is gained through aural sense and regarded as auditory learner. Lastly, there is kinesthetic type of learner.

# 2.8.2.1 Visual learner

A person who learns best by seeing is considered as visual learner. These learner retained that knowledge is an influential way that they perceive and gain by their seeing. In order to get knowledge they increase the usage of diagrams, figures and flash cards in their learning. One of the lines of investigation by Montgomery exhibited that about 65% of the population was visual learners. This type of learner have difficulties in understanding of spoken word or direction. They also found difficulties in taking notes through lecture or in reproducing spoken ideas. These learners feel comfortable with perceiving and organizing knowledge with their sense of seeing. These learners excel in learning by reading or observing things. The main focus of visual learner is on the sight of word. They do not focus on the arrangement of word or the way it sound like. Few of the most commonly used features of these learners are (Lethaby & Mayne, 2020):

- Visual learners are in favor of gaining and retaining knowledge by using books, magazines and other kind of written material.
- ii. These learners are not comfortable with lecture as it is not easy for them to take notes.
- iii. Visual learner grasp the knowledge that is in black and blue.
- iv. They want a peaceful scenario for learning.
- v. Their spelling power is tremendous.
- vi. These learners like detail information regarding everything.
- vii. They like things that are spoken to them time and again.
- viii. Body, language and facial expression of instructor are main observations of visual learner.
- ix. It is easy for them to pay attention on something with the use of visual aid.

### 2.8.2.2 Auditory learners

Individuals of the type of gain and retain knowledge successfully with the use of hearing materials are referred as auditory learner. In view point of Krista (2000) auditory learner perceives the meaning of speech through listening of different frequencies. They found difficulty in taking information that is in written form. They understand it, until unless, they hear it. Such type of learner mostly take a tape player with them for reading. A line of investigation done by Kemp exposed that 30% of the population consisted of auditory learners. These learners seek for aural lesson. They are in favor of discussing, talking things and paying attention in the manner in which other have spoken. Auditory learner use to read something loudly to understand it effectively. For these learners spoken words have imperative meanings in them when they listen the way they sound. Learner of such style take advantage of video or audio tapes in order to enhance their information. This leaner depicts proceeding commonly used features(Krista, 2000):

- i. These learners speak fluently in the class.
- ii. These learner take benefits of audio, tapes and lecture in learning efficiently.They feel comfortable in exams and session.
- iii. They do not pay attention on knowledge until unless they do not heard it.
- iv. Orally presented material draw their attention as compare to the material in printed form.
- v. Auditory learner make usage of loudly reading material.
- vi. Debates and discussions are amusing for each learner.
- vii. Auditory learners have good command on memorize words and names.

- viii. These learners feel free in discussing and talking with others.
- ix. Auditory learner love and enjoy music and sounds.
- x. These learners prefer to recall knowledge by using drill method.
- xi. They feel difficult to sit still and dummy for long time.

# 2.8.2.3 Kinesthetic/tactile learner

When someone learns things from doing; moving during learning and take advantage of hand on activities, these learners are called kinesthetic learner. Kinesthetic learning found a little bit hard to sit calmly for a long time. Kinesthetic learner gains knowledge by experimentation. These learners keep themselves busy in touching and doing things in learning. They are active participant of learning process. These learner like situation which is practical and give them a chance to put together segments and participate in physiological commotions. Kinesthetic leaner have very high hand-eyecoordination and these receptors are very quick. Individual with this learning styles have the tendency to touch other people. They hold others with shoulder or arm while talking with them. Individual of such type mostly place them relatively near to people during a conversation and dialogue with them. One of the good way which fits for learner of such type is experiential method. Also hand-on learning actions are very effective for kinesthetic learners. Such learners mostly exposed following features (Gulnaz, Farooq & Ali, 2018).

- i. The main focus of kinesthetic learning style is learning by doing, experiencing and actively participating in learning process.
- ii. These learners retain knowledge in effective way when they manipulate things.

- iii. These type of learners have ability to master skills.
- iv. Hands-on teaching techniques are effective for such learner.
- v. Writing speed and expression of such learner is not so much good.
- vi. Kinesthetic learners have not good power of spelling.
- vii. Communication and talking speedily are the symbol of such learner.
- viii. Kinesthetic learner takes benefit from Role-playing situation.
- ix. They like to hear music during working or studying.
- x. These learners take breaks often during or work.
- xi. Such type of learner do not like long lecture. They are depressed, when they have to take notes from lectures.
- xii. Individual possessing this learning style, touch others as a cue of friendship.

### 2.8.2.4 Previous studies related to VAK LS

Studies previously conducted in order to identify learning styles of a Foreign Language, have exhibited in the long run that one of their favorite learning style is kinesthetic and tactile learning style. They are not in favor of group style. Jones (1997) described that his Chinese institution of higher education learners studying in Taiwan (N = 81) are in favor of Kinesthetic/Tactile styles, While they are not in favor of individual types of learning styles. There were two lines of investigation conducted. These studies examined non-Chinese students of English as Foreign Language, its basis are Reid's typology, are Rossi-Le (1995). Rossi-Le analyzed grown-up L2 colonist in United States. They are in favor of Kinesthetic/Tactile styles. Furthermore, none of the style was opposed by them. Hyland's Japanese apprentices are in favor of Auditory/Tactile styles

of learning, while they are not in favor of visionary related and group ways of erudition. Peacock (2001) investigated the priority regarding ways of erudition of apprentices of English as Foreign Language and English as Second Language. The outcomes of these researches showed that students are in favor of kinesthetic ways of erudition regardless of all, whilst usually used instructional strategies that fits auditory learners.

There are numerous line of investigations conducted on learning styles of Iranian students of English as Foreign Language. One of the latest studies established by Riazi & Riasati (2007). In their research of giving principles to learning styles of Iranian learner of English as Foreign Language it was concluded that these learners give priority to an active participation of classroom procedures. They approached to have communication and relation with other learners in the classroom. Kassaian (2007) explored the impact of two kinds of instructional strategies on the learning of new expressions. Sixty-six institution of higher education apprentice possessing an auditory way of erudition, or a visual way of erudition involved in instructional strategy settings which were either related to visionary senses or aural senses. Data that was analyzed showed that: 1) the course of study with visual way of erudition gained language materials they had grasped visually is more effective as compared to the materials that grasped in aural way. But the course of study grasped aurally were not seemed to be course of study that grasped the material they have grasped aurally 2) Every course of study all the subjects gained visually presented material in a good way as compared to aurally presented items in the instant and impediment experiments. Kia, Alipour, & Ghaderi(2001)conducted a line of investigation. They explored that among the apprentices in Payame Noor institution of higher education in Iran, those with ways of erudition involved visually possess the greatest scholastic accomplishment.

## 2.8.3 Gardner's Multiple Intelligence

Gardner viewed that there are seven aspects of intelligence of every person and believe that there is difference in a person's capabilities in all areas along with their learning styles which are as follows; First is verbal-linguistic area. People belong to this type are basically giving importance to the sense and arrangement of words. Second is relayed to music. These people are sensitive to the meaning and order of words. Second is musical. They give importance to arena, tune, beat and quality. In logical-mathematical area; people are capable of handling series of reasons and recognition of sets and arrangement. Fourth is partial area in which people take the meaning of the world and try to make again or renovate dimension of that world. Fifthly there is bodily-kinesthetic area. People of this kind have ability to utilize their body in a skillful way and use the things capably. Interpersonal area is another style in which people understand to other people and relationships. Intrapersonal people have understanding of someone's emotional life as a source or way of understanding oneself and others (Ahanbor&Sadighi, 2014).

Multiple Intelligence Theory comprises of nine types of intelligences. It has develop as a reaction of the requirement to attain a good clarification of level of mental or intellectual personality diversities that possibly deal with and residential in the erudition setting. Gardner explored type of intelligence as on the top is the mathematical-logical. Then there is the verbal-linguistic. Then there is the musical-rhythmic. The bodilykinesthetic also lie there. Other types are the interpersonal, the intrapersonal, the visualspatial, the naturalist and the existential intelligences'. These types of intelligences exhibits group scenario of students' individual differences; these are perceived as one's own instruments each individual keeps to develop understanding of novel knowledge and to collect it in such a manner that it can be easily get back wherever required for usage (Nolen, 2003).

There are so many types of intelligences that have their own position and importance. All of them are equally important and significant. Everyone possess these intelligences in their fundamental formulation. However some people are more intelligent than others. All of these theoretical framework are independent, transferable, and trainable and they are interconnected in order to make possible to find out the solution of issues facing in now a day. An important advancement in knowledge has received remarkable strength of lines of investigation conducted in the field of way of erudition explored that the learner in linguistics classroom possess so many diversities of learning reports. Reid (1999) enlists few of the aspects which have been identified in the field of linguistics erudition. There are diversities in intellects. There are ways of erudition involving perception. Then there are field dependence/independence ways of erudition. Another type of learners is analytic/global. Lastly there lied ways of erudition like reflective/ impulsive. She exhibits that there are few advantages of developing learners' knowledge regarding their own learning styles. There is an increase in the responsibility of learners for their own learning and classroom atmosphere. If students are possessing high interest and they are highly motivated in the learning activities. These are effectual transformations and these transformations lead to more effectual learning (Reid, 1999).

It is depicted from the line of investigation done by Gardner that cognitive ability of a person is in form of a group in spite of single. He further viewed that a student learning any subject will be very successful if he gets the chance of using their specific abilities to grasp the essential content. He suggests that, in order to handle a subject, teachers adopt a long range of sources as real and comprehension developments and become clear to others. In the 2<sup>nd</sup> linguistics class setting, learners can be motivated by adopting variety of sources of setting un ambiguity by the application of assignments that are linked to so many other intelligence. Facilitating with so many language tasks that trigger off a number of instruments or intellects presented by Gardner form possibilities to keep busy in different memory passageways essential to generate continuous profound learning. This is not all about to deal with all the individual MI data related to every apprentice in all linguistics setting environment but is the matter of presenting a unbiased way where there are various views about an ideas are integrated (Nolen, 2003). As Schumann (1999) exhibits that a dimension by which motivation reviews are formed is chasing potential. Students' perception regarding their capability to take part effectively in a verbal communication assignment is effected in the manner trainers' exhibit substance in front of their apprentices and the strides pursued to engage them in verbal communication erudition effects. Multiple Intelligence Theory is a helpful instrument to plan for language learning styles that make it sure that learners can handle the situation of competition. When students are aware of their abilities, it effects positively on their personal admiration and can proceed to developing accomplishment in verbal communication erudition.

These models highlight the cognitive and personality traits of the individual differences. These models represent how environment is effective on the learners or learners learn best independently or by interacting with external world. These models also exhibit that learner learn by sensory system or their learning depends on their intelligence.

#### 2.9 COGNITIVE AND PERSONALITY MODEL

It is depicted that personality traits are formed at the extent which we take exposure to the world. This layer exposed on an under lying and having in relation with the everlasting personality dimensions. This model basically focus on one's core personality trait, and their perception about the world. Five main theories are as follows.

#### 2.9.1 Felder and Silverman's Model

This representation of way of erudition was explored by Felder accompanied with Silverman in 1988. This was emerged in1988 and there were two reasons behind the development of their learning style model which attract their attention. Firstly, it was essential to have knowledge of imperative preferences of students regarding learning styles. Secondly, it carried weight to endow with solid bases to trainer for making their teaching efficient. Trainer should have the ability of designing teaching strategies that deal with, are helpful in learners' learning requirement and issues (Felder &Spurlin, 2005).There are five questions that described students learning styles. They formulate that learning style preference is taken into account on putting such questions as: What type of Information does a student gain and retain?

- i. In which form students gain and retain information?
- ii. What type of information organization is more comfortable with student?
- iii. What is student preferred way of processing new information?
- iv. How does a student progress toward, understanding?
- v. What is the way of students' success in comprehending something?

In response to these questions, it is possible to divide students' learning styles four spectrum (Felder & Spurline,2005).

## 2.9.1.1 Sensing or Intuitive

Students with sensing quality as preferred learning style, like ideas, numeric, experiencing and solving problem. Sensing learners are tangible, concrete and attracted towards doing something. Sensing or intuitive learners are passionate with detail oriented towards facts and procedures. Whilst these learners get frustrated when they found complexities in their work. Intuitive learners are conceptual, and they have strong ability to organize novel ideas and fact. They are attracted towards rules and theories. They do not like to perform repeatedly. Their way of tending to complete task/ work quickly, shows their carelessness, which results in breakdown (Felder & Silverman, 2005).

### 2.9.1.2 Visual and Auditory learners

These learners have strong ability to learn something by visionary objects. They basically give priority to present material like pictures, diagrams, figures, graphs, flash cards and maps. Their memory do not lasts long regarding the information that they receive aurally, whereas, it is easy for these learners to gain information through speaking and in written form. Discussion is effective in learning of such learners. Their learning occurs effectively when they explained things to others(Felder & Silverman, 2005).

### 2.9.1.3 Active and Reflective learners

According to Felder & Spurlin (2005) active learners learn in a more better way when they involve enthusiastically in learning process. These learners are not opt to learn effectively through lecture method. Actually, information presented by lecture method are in more passive way. Active learners learn efficiently by trying things or working hand -on experiences(Felder & Spurlin, 2005). While, on the other spectrum are reflective learners. They learn by thinking and working alone. They feel free in face to face situation with another person in their learning. Reflective learner gain knowledge more efficiently in a thought provoking situation in order to perceive information they are offered.

### 2.9.1.4 Sequential and Global learners

Sequential leaner traditionally gain knowledge in linear and minute incremental steps. They prefer to learn in orderly way. They are confirmable with having skillful with materials put forth in a logical order. Such type of learners use logical argumentation in order to solve complex issues. These learners have a very good quality of convergence to think and evaluate. While on the other hand, global learner tend to learn bases and effectively when it is presented in piece before theme. They may take several days or weeks in solving simple problems until suddenly they get it. Such type of learners have the abilities to make gigantic progress in their comprehending (Felder &Silverman, 2005). This model is also linked and it have contribution to many ideas and facts in the company of supplementary erudition representations. There is a correlation representation. An additional dimension of this representation is correlated with Kolb erudition representation. This is also correlated with MBTI.

#### 2.9.2 Myer-Briggs Type Indicator (MBTI)

Myer-Briggs (As cited Rully and Abdul, 2016) presented four categories of individuality and their ways of gaining information. From these categories, at the first position there is an extravert versus introverts. Second is sensor versus intuitive. Third is thinker versus feeler and fourth is Judger versus perceiver. MBTI gives preferences to personnel traits that categorizes in ways of erudition. This erudition representation categorizes way of erudition in accordance to character's manner. Carl Jung's theoretical approach of psychological types is its base MBTI(Felder, 1996). There are four learning

spectrum classified by MBTI. These spectrums further combined too many ideas in order to generate sixteen learning styles. In viewpoint of Clark (2000), data produced by Myers-Briggs tools instruments point out the top priorities of individuals in perspective of four proportional spectrums. These spectrums of learning are:

# 2.9.2.1 Extroversion (E) versus Intro version (I)

This aspect points out the roots of generating of human energy. Extrovert produces his energy from the outsider world. Such learner prefers to talk in spite of thinking. On the other hand, introvert type of individual boost up by their internal task of ideas. These learners are insightful thinker and prefer to think in spite of talking.

## 2.9.2.2 Sensing (S) versus Intuition (I)

One of the lines of investigation conducted by Bright man, (2006) exposed those individuals who learn by using their senses, required things in detail and in explained way. These learners need ideas and they depend upon their surroundings. It is top priority and wish of such type of learner that they should have lecture in properly arranged form and in build up mode(Clark, 2000). Intuitive leaner depends upon their sixth sense. They prefer things in groups in spite of separated and segmented form. They are in favor of relationship of knowledge.

## 2.9.2.3 Thinking (T) versus Feeling (F)

In view of Felder (1996), thinker apprentices are disbeliever. In order to take any decision they follow principles, reasoning and argumentation. Thinking learners have good control over their emotions and do not free them to affect their decisions. Whereas, learners who are dependent on feelings, do not give weight age to principles and put efforts to make decision. While making decision they consider their personal and humanistic aspect. In their view point, empathy and harmony are important.

## 2.9.2.4 Judgers versus Perceiver

Judging learners have very strong decision making power. They have no fear of in facing jeopardy and resolving various problems. The main attention of such learners is on task completion. Their special considerations are the imperative parts of a work. Mostly they are hasty in taking action(Bright man, 2006). Mainly, curiosity is the nature of perceivers. They are flexible in nature and are impulsive. Perceiver learner start a task but they find difficulty in completing their task. There are four dimensions of MBTI Type Indicator of a person way of gaining knowledge. These dimension can be considered as bases on which sixteen learning styles can be established. MBTI is actually a personality model. It is related to few of the other learning models specially Kolb learning style model. Chapman (1998) established that MBTI model is correlated with Kolb model, feeling and thinking aspects of MBTI are similar to the tangible familiarity; intangible conceptualization aspect of Kolb representation of gaining and retaining knowledge. Furthermore, there is correlation in MBTI aspect of extroversion and introversion aspect with that of vigorous insightful aspect of Kolb erudition representation. The approach of MBTI was an imperative addition in the field of cognition. It comprises of an approach that is grounded on apprentice centre is a rapidly famous theoretical framework in order to highlight the manner in which learners are different. They develop command to give response to their differences (Richards & Rodgers, 2001).

#### 2.9.3 Herman Wit kin's Model

Wit kin proposed the comparative analysis of the ideas of learning, field dependent and field independent. In field independent type, learners are basically internally motivated. They give preference to work on their own. They have greater cognitive flexibility for themselves and they have strong impact regarding of their personal verdict. In field dependent type, learners are strappingly persuaded by their milieu and they possess strapping interpersonal relationships. They befall comfortable in team settings. They bother about the judgment of others(Li & Matin, 2005).

# 2.9.4 Keirsey's Character and Temperament Sorter

David Keirsey influentially synthesized the addition of Kretschmer temperament approach and Briggs Myers representation of Jung. Keirsey given that personage diversities were grounded on predominately by person's temper that could be dominantly grouped by intuitive thinker (NTs), intuitive feeler (NFs), sensing perceiver (SPs) and sensing judger (SJs). It is not possible to replace it higher than a person's fingerprints. His disposition and temper depicted that personage's traits are matter of four temperaments. Guardian (Epimethe) learners are directed towards be conventional and give priority to organized and controlled erudition while idealist (Apollonian) learners are aimed at interpersonal behavior. They give priority for gaining knowledge by the use of dialogues. Another type is artisans (Dionysian) learner. These learners are play-oriented, free-wheeling and creative. Fourth is rationale (Promethean) learner. These learners are directed towards erudition. They give preference to gain knowledge with the help theories. They are aimed at evaluating and establishing representations (Wheeler, Jessup & Martinez, 2002). Present line of investigation have emphasis on thoughtful education model by Hanson & Silver.

## 2.9.5 Thoughtful Education Model

Hanson & Silver's model (1991) was expansion of Jung approach of kinds of traits. It was the implication of Jung's individuality descriptor to learning priorities and aptitude. Jung applied four personality explanatory indicators. Although, this representation was applied two of Jung's personality indicators. Firstly, there is the sensor-intuitive. The other personality indicator is thinker-feeler. Thus four functioning's i.e. sensing, thinking, feeling and intuition are building block of this model. Jung said although all these function are there in every person. They lie there with their characteristics. As among these one is most prevailing and other is supplementary and ranked as mostly utilized action placed on number two. At number three there is tertiary which a lesser amount is of used and demand additional force and at number four there is individual's substandard action. Its graphical presentation on vertical axis sensor at the top to intuitive at the bottom and on x-axis from thinker at the left to feeler at the right. This gives us learning styles preference model with four quadrants. Firstly there is

mastery or sensor-thinker (ST).On second quadrant there is interpersonal or sensor-feeler (SF). Then there is understanding or intuitive-thinker (NT). Lastly there exists self-expressive or intuitive-Feeler (NF). Apprentices are classified according to their preferences in these quadrants indicated by scores. Characteristics of four types of learner's are as follows:

- i. The Mastery Learner: These learners take information through senses and process it through thinking component. Learners of this type work in very efficient and organized manner. Mostly learner is neat, well-organized and precise in their work. They need to be active and doing sensing tangible results from their efforts, need immediate feedback and to be in control of the task. They prefer step by step direction but avoid too long instructive task. They want to know exactly what is expected from them. They need clearly structure environment that focus on mastery or factual information and its application.
- ii. The Interpersonal Learner: This is another learning style in which learners take information through senses and process it through feeling component. Learners take personal approach and work best when emotionally involved in witch they are asked to do. Sensing feeling learners tend to be spontaneous. These learner learn best when they can relate material with their life. Interpersonal learners use their own work and sentences when learning new material and gave example of friends and family member's name. They enjoy personal attention more than anything else. While doing task they need assurance, praise and acceptance from other people. They are interested in people and like to listen and talk about people. They get troubled in class as they talk too much. They prefer cooperation

to competition. These types of learners are highly affected by the task and like or dislikes of others.

- iii. The Understanding Learner: Learners of understanding learning style take information through intuitions and process it through thinking component. Learners of this type are independent and need little attention until they complete their work. They don't like to be pressed by the time. Time is meaningless when something of their interest they do. They display great deal of patience and attack problems by breaking them down into components' and they like to reason and see logical relationship. They enjoy arguing on logical analysis and they are concerned about being correct. Their though process follow cause and effect line of reasoning. If at all possibly fitted for a profession in line of investigation of science but frequently do not come across early scholastic accomplishment.
- iv. The Self-Expressive Learner: This is another learning style in which learners take information through feeling component. This type of person is motivated by their own interest. Things they don't like will not be done well. They rely on internal clock. They don't follow steps but prefer their own solution from intuitions. They work with minimum direction and do many activities at the same time. Their work sometime looks chaotic and scattered. Time is meaningless when something of their interest they do. They don't like routine or route assignments and prefer open ended questions. They don't like to be disturbed by changes in routine. They are actually creative learner. They learn best through metaphor building new learning on the structure of comparison with some another. Unfortunately most of them don't obtain good marks in school. Teacher

can assist them by suggesting new and original possibilities and providing choices for completing assignments.

All these cognitive & personality models of learning are related to different aspects of personality/ These models focus on the traits and individuals perception regarding outer world.

#### 2.10 NEUROSCIENCE IN LEARNING

There are scientific bases on which psychological and anatomy form of brain lie in many researches. There are researches which give importance to psychological description of the mind. These researches deals these description in the form of thinking. These also discuss neural processes and development of capabilities of a living being. neural processes and development of competence of an individual.

An altogether different methodology of erudition has been presented which aids in the appraisal planning, instructing and educational program on the part of instructors now a day. Such type of novel erudition process is familiar as cerebrum based erudition since BBL style isn't a recipe of erudition in all respects which reused to foster plans which shore wards by means of the existing headway in erudition measure. It has proven help regarding some groundbreaking endeavors in adapting now a day however generally instructors don't capture its precise importance with adjusted knowledge grounded rehearses (Jensen, 2000).

Learning styles needs logical proof to help it. In any case, numerous instructors, and a large part of everyone, accept that learning styles exist. Learning styles is maybe quite possibly the most broadly accepted neuromyths (Newton, 2015). One examination bunch (Dekker, Lee, Howard-Jones, & Jolles, 2012) tracked down that more than 90% of instructors trust in learning styles and another (Dandy & Bendersky, 2014) showed that more than 60% of educators feel that instructing to understudies' learning styles assists the understudies with learning. Neuroscience assists us with understanding the intricacy of how the mind develops and changes when learning occurs. Educators should realize that neuroscience research demonstrates that learning depends on experience, not learning styles. Along these lines, finding out about neuroscience assists educators with giving better guidance in the homeroom (Lawrence, Ntelioglou & Milford, 2020).

#### 2.11 LEARNING STYLES AND LEARNING STRATEGIES

The expression of erudition of verbal communication techniques is depicted by various canvassers. Wenden and Rubin (As cited Parra, 2016) described erudition techniques that these are the strategies comprised of series of functions, steps and plans. These are the usual works that a learner follows for the purpose obtaining, store retrieve and apply the facts and beliefs. In the meanings of erudition technique is based on the supposition that apprentices deliberately put them busy in achieving definite objectives which are chased by learning strategies. These strategies are widely considered as planner instruction as techniques. While in learning language, all learner apply language learning strategies whether they do that deliberately or in deliberately to process novel knowledge and take action in the language classroom. This situation of language classroom becomes like an issue resolution atmosphere, where verbal communication have to confront some

of their complexities in giving to assignment by trainer, The learners made efforts to get the fastest or very easy source to perform for his requirement, that is applying verbal communication erudition techniques is indispensable. Shortly expressing, erudition technique is an exterior art adopted by apprentices, mostly in conscious way. For the purpose of improving their erudition (Jie & Xiaoqing, 2006).

## 2.12 APPLICATIONS OF LEARNING STYLES IN THE CLASSROOM

There are so many lines of investigations that have been conducted in order to facilitate sources through which learning style can be affected in the class. Among these researchers there are two intellectuals Dr. Rita Dunn & Dr. Kenneth Dunn (As cited Dunn, 2007). In the views of Dunn& Dunn, there are many factors that effects learners. These are; (1) learners' direct milieu (resonance, illumination, warmth, and organization); (2) learners' self-emotional state (stimulation, perseverance, job, and aspirations regarding formation or suppleness); (3)One's sociological demands (personals, pair, classmates and friends, group and so on); and (4) learners' bodily requirements(power of perception, ingestion, time, and motion). They argue that the learners who have the knowledge of their preference of learning styles, they show high score on testing, good behavior and are supplementary competent if their erudition is placed are in such manners with the help of that they found it easy to interrelate it. So, it is beneficial for the educator to make their teaching and evaluation vis-à-vis learners' preferred style. Though, there are diversities in learning styles among learners of classroom,

Dunn &Dunn are of the argued that it is obligation of the trainer to apply transformations in their class that is of great benefit for all learning styles. Few of these transformations comprises of designing of class, formation of stumpy cluster strategies and the enhancement of Contract Activity Packages. Rearranging and settings of the class includes fixing dividers that are useful for arranging the classroom innovatively, clearing the designing the class setting comprises of placing partitions that can be utilized for the purpose of arranging the class innovatively, cleaning the ground part, and integrating belief and thinking into the formation and look of the class. Stumpy cluster strategies usually comprise of a "circle of knowledge" in which learners by sitting in a round shape and talk about a theme associatively along with other strategies used such as panel erudition and inspiring.

There is planning of erudition like Contract Activity Packages that smooth the progress of learning by the use of the following components : 1) clearly mentioned about the need of learning of the learner; 2) resources are in a variety of senses that edify the call for knowledge. Firstly, there is auditory sense. Secondly, there is sense related to vision. Last one is sense of tactile and kinesthetic; 3) With the help of the actions which the novel-skilled knowledge could be utilized ingeniously;4) the distribution of innovative plans within stumpy clusters of fellows;5) slightly 3 stumpy clusters strategies; 6) a testing done previously, a type of one's own testing, and a summative type testing (llcin, Tomruk&Yesilyaprak, 2018).

#### 2.13 WHY IS LEARNING STYLE IMPORTANT?

Keeping the awareness of self-way of erudition is inevitable for apprentices and trainers. This actually handles the erudition procedure. Way of erudition is imperative on various grounds; nevertheless, three of them are fundamental. Foremost one is that there

is variation in individual's way of erudition. As, by nature there are diversities in individuals. When a personage takes the accountability of their self's erudition it may cause the effectiveness of learning process. So then, to cope this problem, it is imperative for personage to be aware of his preferences regarding the ways of erudition. For the effective learning learner keeps the knowledge of the features of that way of erudition. The exposure of erudition procedure can be foster well when everyone builds up a familiarity of their selves' formulation of way of erudition. This cause a source of satisfaction for them with the environment in which he/she is interacting. He/she takes all opportunities of learning as a chance. By adopting such manner, it become possible for personage to possess and attain the continuously varying knowledge (Coffield, 2004).

There are many causes which show that it is imperative to have the awareness of the way of erudition. Everyone has his own ways of perceiving facts and ideas. In similar way, there are diversities in ways of erudition of individuals because by nature there are diversities of way of erudition among individuals. It facilitates trainer with the chances to perform content in front of apprentices in an assortment of manner by implementing a variety of adequate methodology of instruction. By adopting and adhering to merely a single instructional methodology will be the cause of boredom and monotonic environment containing classroom. Such atmosphere will not be appealing for apprentices.

Furthermore, recognizing individuals' way of erudition will be helpful to arrange so many issues in edification and coordinating. Obviously, it is not possible to cope every detail of teaching learning process. Somehow, the knowledge of our apprentices preferred way of erudition will be helpful for the trainer or instructor in managing various things and issues of edification. Knowing of the apprentice way of erudition, their psychological characteristic and diversities for motivation. It will be helpful for trainer to manage and adopt teaching techniques adequately and in accordance to the situation in the class (Coffield et al., 2004).

#### 2.13.1 Advantages of Identifying Learning styles

It is depicted from various lines of investigations there are so many LS that a person possess. These researchers show that among all those LS that an individual possess, one of the LS is dominant. Others existing LS are comparatively at a reduced amount of prevailing. In the present of so many LS that a person possess, the degree at which they are used, could be changed (Tamel, 2002). LS can be discussed in three domains. One is cognitive domain. Another is affective domain. Lastly there is psychomotor domain. Cognitive domain controls the system of brain internally. This domain of LS is related to information. This is transferrable by the process of education. As far as affective and psychomotor domains are concerned, they are about the priorities of a person regarding learning. It deals to solve problem regarding education and teaching strategies (Kazu,2009). If a person is aware of learning style, he will be able to identify different personality characteristics of individual. He can also identifies the existence of diversities among personages. Regarding this, like way of instruction is

needed to formulate such erudition theories that take into account intellectual, cognitive, emotional and psychosomatic features(Kazu, 2009).

If we see on the part of the students, we came to know that the awareness regarding the LS is vital for learners. When student is capable of recognizing his/her learning style, he/ she will synthesize it in the instructional and erudition procedure. This is helpful for students and students do best in their learning. Knowing of LS is helpful for the learner to overcome the issues confronting in teaching and learning process. Knowledge of LS is also helpful in controlling their lives. This knowledge of learning styles identification is helpful for the learner to develop an ability of solving problems effectively. If the learner have the ability to solve problems successfully, he/she has the ability of controlling his/her personal living (Biggs, 2001).

An individual gains facts and ideas and learn in an influential way regarding the fields that are in accordance with his way. A personage possessing way of erudition that is not in accordance with or having no connection to the fields that he is being taught, results in the deficiency of confidence of personage. This may results in absolute malfunction. It will be the cause of the creation of depression in apprentices. The learner may collapse with lack of stimulating behavior. It is helpful for apprentice to get answer of such questions like what is the reason of diversities in apprentice's way of erudition. Through this knowledge of differencing of learning styles, it is possible for apprentice to command over procedure of instruction and erudition. A significant and necessary feature of learning is to achieve goals and be flourishing in his living. This is also included in procedure of instruction and erudition which make possible for personage for the purpose

of gaining facts and ideas influentially that turns and altered, regardless of seeking supplementary(Kazu,2009).

Keeping the information of LS facilitates a person with the knowledge about the differences in students preferred LS. It gives information that why students used different way while learning. It is helpful for commanding the learning process. This is one of te most important things as an imperative indicator of learning is to learn independently and autonomously. This is the matter for students to realize his obligation for his/her learning. With the help of this, they will be able to have knowledge about their own LS. If the students realize that they have to learn adequately, so that they grasp the information it will reduces the role played by the teacher for guiding and controlling the learners. This is the stage when teacher proved as a guide for the learners. However, learners are wholly-solely responsible for their learning. Students are the core of the process of learning. They are controlling the whole process(Tamel, 2002).

Felder et al. also discussed the benefits of the knowledge of identification of LS for the learners. The learner, possessing this knowledge of LS, recognize their goals and objectives in a very easy way. In order to attain academic goals, they select appropriate ways of learning that fits for them. In contrast, the individual who cannot recognize their LS, fails to attain remarkable accomplishment in life. They cannot understand that what should be learn and what ways should be adopted to learn it. Such type of learner are not confident. Frustration prevails on them. Knowledge of identification of LS is necessary either for teacher or for learners (Felder et al., 2005).Benefits of identifying, recognizing

and comprehending the manner in which students gain knowledge are various. Few of them are discussed here.

- 1. Academic Advantages
- 2. Personal Advantages
- 3. Professional Advantages

## 2.13.1.1 Academic advantages

- i. Knowledge of apprentices' way of erudition students' learning style improve apprentices' erudition capabilities and powers.
- ii. Student whose learning style is identified, attain excellences in educational field.
- iii. It is helpful for students to excel in education.
- iv. It is a helping aid for students to control the constraints and difficulties that have to cope with.
- v. It is a source of satisfaction for students to consider their learning styles. By this, it removes tension and anxiety among students
- vi. It aids teachers in the advancement of instructional techniques (Felder et al, 2005).

## 2.13.1.2 Personal advantages

Exploring one's way of erudition also possess personal benefit for apprentice. These are:

i. Identification of learning styles of students build confidence and self-reliance of learners.

- ii. Exploring learning styles of students promote learners' ability to take advantage of their brain.
- iii. It gives vision to students about his own capabilities, potential and deficiencies.
- iv. Students are stimulated and they have intense concentration in erudition procedure.
- v. Apprentices came to know in what way they make learning enjoyable and effective.
- vi. It is helpful for apprentices in mesmerizing naturalistic capabilities and proficiencies (Felder et al., 2005).

#### 2.13.1.3 Professional advantages.

Exploring one's way of erudition has some of the skilled benefits. These are;

- i. It keeps apprentices aware of advancement in profession.
- ii. These students are become successful as compare to other students.
- iii. It draws line of distinction between people in order to make effecting team.
- iv. Knowledge of learning style aid students in their presentation of classroom. (Fleder et al, 2005).

## 2.14 RELATIONSHIP BETWEEN TEACHING AND LEARNING

It is not possible to discuss training and erudition separately. Erudition is a standard and outcome of influential instructional process. Erudition is the final objective

of instructional process. If there is no one to learn, then there is no instructional process exists. Newcomb, McCracken & Wormbrod have identified some of the basic principles of erudition and instructional process.

- 1. If the material that is selected for erudition process clear connotation arranged and content of subject is understandable for apprentices, then the process of erudition steep forward fast and sustain for long time.
- 2. Prerequisite for erudition is readiness. Erudition should be facilitated with material

related to subject and with erudition practices that take the learner from the start.

- 3. Stimulation is essential for apprentices to gain knowledge. Apprentices should be facilitated with such erudition activities that take into account the wishes, demands, interest and requirements of the apprentices.
- 4. Participation of apprentices is important to motivate them in order to set goals and planning activities.
- 5. One of the most motivating force is success.
- 6. Apprentices are directed towards motivation when they put their efforts for the work that can be chased by them so that it seemed that accomplishment is attainable, but this is not happened always.
- 7. When apprentices are aware about that they are performing in erudition successfully, their efforts are on peak, and it does not happen without their awareness.
- 8. Behaviors that possessing reinforcement (incentive) are easy to grasp.

- 9. One of the more influential, apprentice's behavior should be reinforced(rewarded) on immediate basis as required behavior chased and it should have clear connection with the behavior of the apprentices.
- Instructional erudition is more influential as compared to the erudition that not directed.
- 11. In order to get maximum amount of erudition, apprentices adopt the way of "inquire into" in spite of the way of "be instructed in" regarding the content. The way leaning towards issues in instructions enhance erudition.
- 12. Practice is important for apprentices as it make erudition best.
- 13. One of the most influential, administer exercise imperatively take into account regarding the working erudition familiarity (Thoron, 2010).

#### 2.15 INFLUENCE OF TECHNOLOGY ON LEARNING AND TEACHING

In the advanced data time, the abundance of the world's data can be gotten to through an assortment of gadgets. Innovation that was once costly and restricted to just the advantaged minority has now progressed and get far less expensive (Edwards, 2009). Understudies have grown up with innovation surrounding them, and educators should adjust to this new way of life. Upgrade learning and association between students, instructors and projects - correspondence Based on innovation, alludes to cooperate progressively and can be animating for students, give criticism continuously, propelled students to take part in exercises to increment and improve relational abilities and thoughts (Fazeli, 2007).

Most specialists have accentuated the worth of the connection, students communicate with one another and cooperation among students and instructors are significant markers of value in colleges. Correspondence rehearses, particularly innovation based nonconcurrent correspondence, intellectual or social collaboration among instructors and students, self-coordinated learning, and autonomous individual improves and broadens the information on members (Farajollahi & Sanaye'i, 2009).

The utilization of innovation in the homeroom has the advantage of expanding scholastic accomplishment from the viewpoint of both the understudies and the teachers (Courville, 2011). In an investigation by Usher (2012), true utilizations of innovation alongside other scholarly subjects persuades understudies. They found that when innovation based request learning corresponds to true circumstances, understudies start to see the natural worth of what is being realized, which builds revenue and inspiration by the understudy.

# 2.16 FACTOR INFLUENCE LEARNING STYLES AND ACADEMIC ACHIEVEMENT

Can (2009) says that there is considerable relations amongst apprentice's way of erudition, sex category and the kind of edification for which they are given exposure. Ashraf (2004) found self-esteem is related with scholastics accomplishment in a positive manner. Girl showed high scholastics accomplishment and playfulness of students. Ali (2002) showed self-esteem, self-concept and academic achievement of students are positively correlated. Shafiq (2002) found that academic achievement and girls showed high academic achievement and creativity. Mehwish(2006) says academic achievement of private school students in high and high achievers are more creative. Procrastination is baptized as unimportant postponement of a behavior which can be fulfilled or having preference or avoiding it for final moments. It was is also found that erudition modalities of the apprentices are correlated to the decrease in scholastics postponement attitude of the apprentices and an increase in the scholastics accomplishment(Babadogan, 2010).

Vincent & Ross (2001) explained, most educator have the same opinion that ways of erudition are at hand. These ways of erudition have influences on the procedure of erudition. Kaurse (2000) said that not a single method is best for all students but variedly of it, depends upon individual learner. He found that it is possible for a number of apprentices to grasp knowledge in flaw full way very quickly especially when they take advantage of their way of erudition strength. Philips, et al., (2001) found that different activities was found to be involved in men and women when engaged in different activities e.g., reading, listening, experiencing emotion etc. Arif (2007) investigated that perceived parental involvement and healthy family structure contribute to academic achievement. Small families have high academic achievement and children of employed mothers have parental involvement more than non-employed. Qureshi (2007) examined parental acceptance/rejection and self-efficiency can cause high or low academic achievement among students and there was no difference found across gender for academic achievement. Seveeriens & Dam (1997) investigated that man on average score high than women on undirected study. According to Mir (2009) learning depends upon personality type. There was found that mastery apprentice and consciousness are positively correlated. Interpersonal and amicability have positive relationship. Furthermore, understanding learner and sincerity are positively correlated. There is

significant correlation between self-expressive and extraversion and significance high on self-expressive and understanding learning styles but boys on interpersonal and mastery learning style (Mir, 2009).

## 2.17 RELATION SHIP BETWEEN ACADEMIC ACHIEVEMENT, LEARNING AND DECISION-MAKING STYLES

Among university students the most preferred learning style is mastery learner and self-expressive learner. males that understanding, interpersonal Among understanding and self-expressive learning prevails more than mastery and interpersonal which are among females but results were non-significant so gender difference was not found. Difference in all groups for academic achievement was found. Academic achievement among mastery and understanding learners was found to be high than self-expressive and interpersonal learner (Chuhdaty, 2004). Clump &Skogsberg (2003) study investigate effect of geographically distinct location of similar university on apprentices' way of erudition at the Midwestern and female student s showed scores and female students showed score significant lower on the deep processing subscale and significantly high on the methodical study subscale than male students. Students show more abstract conceptual & interrogative reflection so their score was high at the intuitive end of them years. Brigg personality inventory, whereas less talented student was be more connote (Claret, 2000). The catalog of erudition procedure learning processes (1LP) was actually created by assessing personage diversities in the ways of the processing of knowledge of college stage learners (Kozmindky& Kaufman, 2002).

Another line of investigation explored the results and outcome of above grade discipline apprentice's profession taking decision procedure for choices application in above level edification. Result showed that confronting the profession decisive actions at lastly in their grade considerably added to selection of actualization, scholastic modification, dedication with the selected course) for the period of the first trimester in advanced edification. The importance of these aspects is higher education (Veerle& Karine, 2006). There are many other researches on learning. Quality education ensures increased access and equality. Results of study indicate students have different preference and these preferences were related to higher achievement in university student mainly for fine arts student (Khan, 2005). In another study established by adopting the Kolb erudition styles and the scholastics accomplishment and their educational stages(1<sup>st</sup>, 2<sup>nd</sup>,3<sup>rd</sup> and 4<sup>th</sup> fourth, years), sex category and kind of edification they are exposed to, it was explored that apprentice's way of erudition and scholastics accomplishment are not significantly correlated. But there are significant correlations between their sex category and kind of edification they are exposed to Can, 2009). Demibras & Demirkan (2007) explored that effect of learning style and sex category on the presentation of freshman design apprentices in three succeeding scholastics academic levels. Finding indicates that mostly students have converging and diverging learning style. Result also indicate that the performance scores of mates were higher in technology-based courses, but scores of females were higher in arts(Demibras&Dernirkan, 2007).

Though managerial line of investigation exhibited that participation of employees in taking decision will be helpful for the improvement of motivating individuals and high morale. In experiment from elementary schools the students decided their area and major erudition performances with the instructor. In second condition the trainer announced the area and activities and push apprentices to take participation. Result exhibited that students participated in class decisions showed positive attitude regarding the school and the subject, interaction with friends, performing fluently regardless of any regulation or control, and gain more knowledge as compare to those apprentices whose trainers deciding for them (Richter, & Solved, 2007). Peter carried out a line of investigation for the purpose of exploring the correlation of personage ways of taking decision not merely a reflection of patterns and intellectual exercises. It comprises of initial personal analysis and wide-ranging capability of taking initiative and maintaining intention (i.e., selfregular) and Raths suggested that learning is smalls groups is more important when it involves not only acquisitions of knowledge but modification of attitude and implementation of new behavioral norm so learning through interaction rather than thinking by own increase dependence on other people (As cited in Hither, 2012). The study by Smiths (2010) investigated various aspects of the intuitive style and it relatives with learning and education from a dual-processing perspective.

#### **2.18 MOTIVATION**

Motivation is a very important topic of psychology. It is also significant in educational settings. Suppose to have its origination from a word of Greek "mover" that take the meaning of drive forward so motivation is aroused state of the organism to act in a specific manner and direction. H. A. Murray describes that motivation is among internal component which occurs, instructs and synthesizes the behavior of a person (Murphy, Karen &Alexander, 2000). The meaning of impetus in edification is the inculcation and

stimulation of concentration in study. Its focus is also on supplementary activity the apprentice. It comprises of comprehending and utilization of aid for apprentice in realistic way and also helping the apprentice to acquire novel desired stimulus. Motivation techniques(praised, reward, feedback etc.) are used by the instructors. Those teachers who are involved in every students' task and who have the knowledge of group of dynamics, are more liableto provide a successful and rewarding learning environment. In the same way the teachers who are warms and friendly in their association with children are likely to build up adhesive in spite of hostile attitude and diligent manner towardsschoolwork (Kruglanski, Chernikova&Kopetz, 2015).

By summing up the a debate it is obvious that motivation in teaching and learning process is among the imperative influential instruction because teachers self-efficacy, reward, praise, their expectations about students their method of teaching and grouping evaluation class room environment feedback etc. and how teachers used these things effectively effect students motivation in the classroom. Shortly we can say, teachers' attitude shows significant performance in motivating students (Huitt, 2011).

Motivation in education is an imperative component of students learning achievement and to up lift the standard of education in Pakistan. To motivate students on an individual basis, it is essential for a trainer to be aware of the student's attitude, interest, mental level, behavior etc. as there are so many diversities in people. It is a fact that there is no correct and incorrect way of motivating the learner to learn. There are so many other motivational strategies that are adequate and influential in many ways. To motivate each pupil effectively it requires that you know your professional knowledge and judgment will strengthen effectiveness of learners in their classroom (Kruglanski,et al.,2015).

A number of studies have been conducted for its investigation. Motivation is the matter of any specified occurrence in behavior. There is a reason behind our actions(Bentham, 2003). In educational setting, it is the matter of the findings of the cause of students' act of learning. It is also the matter of finding the cause of students working hard, in order to get grades. Finding of these causes are different and recommended the motivational explanation. So, the idea of motivation occupies a central position in psychology of learning. As there are transformations regarding motivation were achieved(Cocea,2005). Academic motivation is usually considered a most counting factor for the academic achievement and excellence of academic performance. It is a universally truth that motivation is interrelated with learning. It is similar to that of Dewey's view point that the formation of an imperative behavior is an aspiration to learn. There is direct proportion between the motivations of an individual about a subject, he has to cope and that of his/her learning regarding that subject. The more will be the motivation of a learner, the more will be the learning(Valery, 2009).

To understand concept of motivation in a better way it is imperative to grasp the sense of the expression "motivation". The origin of the expression of motivation is in the Latin expression "mover" that takes the meaning of putting into working or to stimulate(Passer & Smith, 2001). We can consider it as a stimulating force. Most of psychologists have depicted motivation in so many ways. Elliott, et.al.,(2000)stated that motivation is a condition which is in someone's inner self that enforce people to act. It

backs up person in specified dimensions and keep him busy in various activities. In a simple way motivation is regarded as the characteristic that leads someone in doing something or not (Gredler, 2001).

In the view of Sharma (2005) motivation is the procedure of keeping the living being into somatic and psychosomatic activities. With the help of this action, an individual is capable of fulfilling his requirements and aspirations. Gray describes inherent and external dimensions of stimulation. He is of the opinion that it is collection of components. Out of these components, some lies inside the human beings and some lies outside of the human beings. These components stimulate a person to act in a specific manner, at a specific time. The main attention of Passer & Smith (2001) was in their description of motivation. In their view point the nature of motivation is oriented towards goals. Motivation has an impact on direction of the behaviors. It also prolonged the behaviors. Furthermore, Sing (2005) added in this by saying that motivation is the accomplishment that implies an individual to suppose that an attitude is usually complimentary towards one's task proceeding him to act calmly.

Donnell, Reeve & Smith, (2007) assumed that act of triggering off makes an individual to have a strength of energizing and directing behavior. In their views this power of energizing indicates the behavioral strength, extremity and effortful. In their view, course depicts that the focus of actions is on the completion of a meticulous objective. Shah & Param (2002) beautifully described the process of motivation as under: In their views outsider stimulus (manipulation) and insider stimulus(inspiration) results in

the decrease of the motivation or motivation that causes dissatisfaction or satisfaction depending upon. They defined it as:

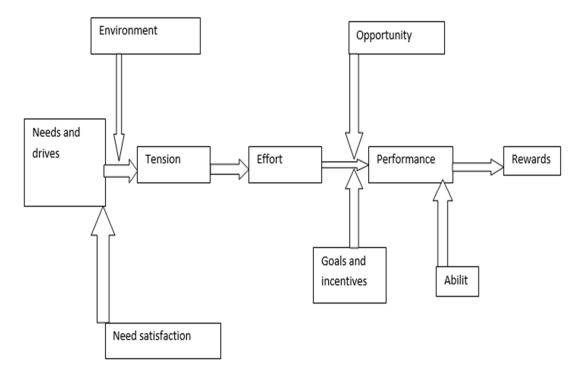


Figure 2.3: Process Of Motivation

Depicting this in a simple way, the act of motivate is a feeling that leads someone towards a specific goal. It is an aspiration to gain something that is challenged. It directed towards need. In the viewpoint of Dostal (2007) achievement is the motivation of a learner to accomplish goals. In his view, socialization is a major motivation for doing something. Sing (2005) in a very good manner, defined the arrangements of success as; He apparently illustrates that increasingly arousal of motivation will be resultant in accomplishment. Singh(2005) & Kalat (2000) described the characteristic of motivation as under.

1. It is inside an individual.

- 2. It is an enduring procedure.
- 3. There is a variation in it regarding people.
- 4. Motivation can be exposed positively or negatively.
- 5. Motivation is directed towards goal.

Motivation is initiated towards goal. Academic motivation is among the one of the necessary and crucial agent in learning. Learners who already have fear of their failure, having no trust on themselves and do not want to continue their studies are actually, de motivated. They are adhere to the belief that they cannot be successful in any cost. This kind of thinking and belief have negative impact on their motivation and academic achievement. In viewpoint of Elliot, et al., (2000) there are four aspects through which motivation is affecting performance in at least four ways.

- i. It heighten up the degree of power.
- ii. It is goal oriented. It has impact on individual preferences in findings rewards.
- iii. It attracts individual to take initiative in activities and keep him busy in those activities.
- iv. It has great impact on the learners learning strategies and learning processes.

Dostal(2007) described the following aspects of motivation:

- 1. Attainment
- 2. Socialization
- 3. Reward stimulation
- 4. Frightful triggering off

#### 5. Shifted motivation

Waller(2005)described five principles of motivation. In his view point, these principles are implementable to learning in any situation. These are as follows;

- i. In order to keep students be motivated towards learning, incentives are used.
- ii. On comparing Intrinsic motivation and extrinsic motivation, It is found that the prior is better as compare to later on. Intrinsic type of motivation lasts long and it is self-directed. On the other hand, extrinsic motivation is dependent upon reinforcement in form of praise or tangible rewards.
- iii. One of the most influential aspect of motivation is readiness. It is imperative for learning that individual is willing for learning.
- iv. The way of arrangement of learning material is also counted in enhancement of motivation

According to Kochhar (2001) functions of motivation are as under;

- i. Interest of the learners is imperative for learning. It should be created.
- ii. Interest of the learners in learning should be directed.
- iii. Interest among the learners in learning should be initiated.
- iv. In learning situation interest among learners should be sustained.
- v. Those activities should be included in learning that are more energizing.
- vi. The learner behavior should be arranged accelerate, directed and sustained.
- vii. The extent for doing and procedural result of the learner should be aroused.
- viii. Learner should be made tension free and relax.

#### 2.19 FACTOR THAT AFFECTS STUDENTS' MOTIVATION

There are many factors that influence learners. These factors are comprises of such as parent contribution, trainer's keenness, friends, the apprentice's surroundings, self-activities, self-admiration and one's own reflection. These factors are very counting and remarkable for the comprehending and significant off learning. These factors are helpful in the development of long-lasting learning (Yilmaz, Şahin & Turgut, 2017).

#### 2.19.1 Parent Involvement

A very influencing dimension of learner motivation is parents' contribution. As before child get started to attend the school and start facing the teachers for their learning process from the teacher, the parents are the preliminary teacher of the child. In the view of Brown (2002), when parents participate in the educational process of their child, then it is very effective for the child to comprehending the learning which aids in the class. It will be also helpful at home.

#### 2.19.2 Teacher Enthusiasm

The attitude of trainer can be disadvantageous or helpful to learner stimulation process. Petrick, Hisely & Kempler (2000)explored that teacher's enthusiasm has effects on learner' intrinsic motivation. Brown (2002) is of the view that that motivation of teacher and learner are reciprocal to each other. Teachers may lead their learner towards their high motivation of learners. The power offered by a group of encouraged learner also become the source of encouragement for the teacher.

### 2.19.3 Peers and Social Environment

Companions of a child are an imperative component of an apprentice's communal environment and to the highest degree manipulate the belief and ideas and task of learners. Companions of child can be the reason to create good environment or bad environment for the apprentices and can affect degree of impetus. It is greatly imperative that social endorsement and acceptance are outstanding at all times (Palmer, 2007).In view of Brown (2002) when someone fulfill the aspiration of becoming prominent, social rein forces are created.

#### 2.19.4 Experiences of the Learner

The great attention should be given to the experience while discussing motivation. In the development of motivation, apprentice's own activities are most effective. As the learning of such life experiences give permission to the learner to make a relationship of oneself in learning process (Palmer, 2007).

#### 2.19.5 Attitude

Idea of motivation and behavior are attitude are correlated with each other. The learner's aspiration for a specific subject consists of his or her feeling in favor of or opposing to that whatever he student's attitude towards a particular subject consist of his or her feeling for or against what he envisage for that subject. Thus, a behavior comprises of sentiments(considerations), leading (in favor of or opposing), an objective (the something) and intellect aspect of learner (learners' perception about subject), if a learner is in favor chemistry subject, it takes the meaning that he is comfortable in participating the activities that deals with information regarding subject of chemistry for him. Just like that of attitude, motives up bring and leads to activities purposefully (Sichivista, 2007).Frith (2004) stated that in an educational process learning is that what someone perform. In some cases, it can be judged though behavior. In a similar way, as treating with employees, it is imperative to indicate to learners specified behaviors that depicts an attitude. Learner's attitude toward learning is an intrinsic feature. It is not always exhibited though behavior.

#### 2.19.6 Competence

One of the intrinsic motives for learning is competence. It is greatly correlated with self-efficacy. When a person do something in a very good manner, he feel pleasure. Accomplishment in a subject for some learner is not sufficient. It is not sufficient for a learner to facilitate him with the sense of efficacy for success, but the teacher should also provide learner the chances to verify themselves that they can attain (Sichivista, 2007).

#### 2.19.7 Self-Esteem

Personal admiration and one's own reflection of the apprentice is essentially a way of the people to give importance to themselves and others. In the view of Cerny (2001), when a learners give importance to themselves and other classmate of them, they will also seek for high level scholastics and communal criterion for their own. Accompanied with high personal admiration, results in high impetus. The learner's immense capabilities and intellect are significant. Craven (2004) has pointed out that there are so many l imperative variables that can affect learner's motivation.

- 1. Goals: Obviously definite goals and instructions are the requirement of the learner. What are the reasons of their performance? Why they are mastering for something?
- 2. A Plan: Its nature may become on or specified. It helps learners to take advantage of it by the awareness of attaining their goals and about the appearance of the procedures.
- 3. Charting Success: This is significant to keep a procedure of charging development and identification accomplishment. Keeping the learner aware of their advancement.
- 4. Flexibility/Creativity: It is highly motivated for learner to facilitate them with a class atmosphere that is flexible and that back up the learner for innovation.
- 5. Implementation in bona fide world; it is important for a learner that he has ability to establish relationship between his learning and his life conditions. To help learner in making interrelation of real life and implementation are source of motivation.

#### 2.20 COMMON MOTIVATIONAL TECHNIQUE USED BY TEACHERS

If the students are highly motivated and involved in learning then there will be minimum drop out cases and it also increase the degree of learner's accomplishment (Kushman, 2000). So, thrusting the apprentices into a situation that is interesting in school and motivating them to accomplishment are the targets of the teacher. Actually, various lines of investigation exposed that a major cause that lessened learner's involvement in school drop out that learners grown up (Anderman&Midgley, 1998). It is evident that when learner attain middle school, a large number of learners show less interest in school assignments. Some teachers have the view that their obligation is merely to transfer knowledge. Motivating apprentices is not included I n his duty. They just have to utilize time only to transmit material. This will not be sufficient to fulfill his duty. Motivation is significant feature of the learning setting. It appeals interest to arouse and sustain in learning. Interest is one of the fundamental component of learning. If there is no presence of interest in students, then there is no occurrence of learning. It is evident that the value of motivation is essential in learning. It guides the students in an adequate formulation of intellect for learning. It attracts the concentration and force of an individual towards the work or information to be learnt(Bhatia, as cited by Naseer, 2008).

The line of investigation established by Reeve, Bolt &Cai (1999) depicted that there are three types of needs. These are related to the ways of teacher's motivation. Connectedness was grown up by teacher facilitation participation(concern, reception). Expertise was brought-up by teacher proficiency facilitating configuration (most favorable target, presentation comments)and personal independence was emerged by teaching facilitating independent encouragement(options, allocated decision taking).

Learners' motivational standard is effected by the ways in which teachers are motivating the learners. Effect of motivation is not equal for all people. All of us have variety of needs, goals and various personality traits. Although instructional strategies are same, but all of us are yet receive motivation with the diverse passage of time. All the teachers put their efforts to take great care of learner's needs of motivation. They also put their efforts to facilitate with an environment where there a learning community can be created (Murphy, Karen & Alexander, 2000).

Traditionally, learner is motivated at some extent intrinsically in spite of extrinsically. Commanding of learner maximizes the relatedness of learning and as a result there is an improvement in students' motivation occurs. The awareness of motivation is beneficial for educators as they have to face so many issues in scenario of learner reacting in different learning actions. Few of them indulged in innovative learning excitedly. Few of them start learning whatever teachers offer them (Schunk, 2002).

In the viewpoint of Good & Brophy (2003), it is imperative for teachers to show their personal interest in learning. Teachers should also back up their learners to give importance to learning in the form of reward. They should also back up personal awareness procedures which are helpful in producing fulfillment and the capability of enhancing individual's life. They stated that it is imperative for teachers to present himself as exemplary person by exposing their thoughts and ideas regarding implications like learner become aware about the way in which qualified people apply knowledge and ideas gained in school in order to comprehend and react towards daily experiences in their personal livings. The exemplary manner in which teachers think regarding subject matters could be resultant in effecting their learner's interest in subject matters. It is imperative for teacher to give a plenty of time to motivate learners. It is an admitted fact that learning of a properly motivated learner at its highest level and its speed is fast as compare to those learners who are improperly motivated. It is also obvious that time consumed for creating motivational atmosphere of the classroom can be considered as the time utilized for investment, in spite of the view that it is devastated and it is not profitable at all. An atmosphere of motivational class is influential not for the behavior of the students.

Those learners who are engaged in learning do not show maladjusted behavior and do not create disciplinary issues. Individual perceives information about themselves when other people deal them. Regardless of specific approach and strategy, role of teachers' behavior is inevitable as a mechanism of motivation. There are many techniques used by teachers to motivate students. Some of these are:

- i. Principle of Pleasure and Pain
- ii. Reward and Punishment
- iii. Aspiration Level
- iv. Praise and Blame
- v. Competition and Cooperation
- vi. Knowledge of the result
- vii. Novelty
- viii. Setting of Goal
- ix. Avoid the use of stressful procedure
- x. Facilitate the learner with real world and representative forms.
- xi. Develop the demands for learning and motivate the participant learners. (Chauhan, as cited Lawrence-Brown, 2004).

Other countries used different kinds of strategies that are applied in a successful way. Some of the strategies used are team-teaching and applying discussion method.

Some other techniques like developmental task and programmed text are also used effectively. We can also use these techniques in our schools and can test their effectively. Regardless of all these strategies suggested here, the position of the trainer is essential. His teaching and teaching methods have their own place. Warmth and his strategies of solving issues of students are imperative for the motivational process (Chauhan, as cited Lawrence-Brown, 2004).

## 2.21 SELECTION OF APPROPRIATE STRATEGIES OF MOTIVATION

Teachers adopt various activities in order to give learning experience to get desirous transformation among individual learners. Teaching activities generate the adequate learning situation such scenario that requires physical and mental involvement of the learner. Through adequate strategies of motivation these involvements are generated, and they are prolonged.

In viewpoint of Sharma as cited Hoadley& Ensor (2009) the teacher should choose adequate strategies of motivation on the following grounds.

- 1. Requirements of the learners
- 2. Educational objectives.
- 3. Erudition compositions.

## 2.21.1 Needs of Students and Technique of Motivation

Mostly the individual's learning and behavior revolves around the demands. Demands control and regulate the individual's learning and behavior. When someone is demanding something, it causes stress in him and he wishes for the fulfillment of his demand. The variation in individual learner's demand is rapidly.

A distinguished and valued categorization of individual needis Maslow's hierarchy of needs. It comprises of five stages: Firstly there is psychological need. These needs of individual are lower-level needs. Secondly, there is safety need. These are also lower degree of needs. Then there is need for love and affiliations. These needs are concerned with higher order. Fourthly, there is need of self-esteem and lastly, there is need of self-actualization. Both of last two needs are higher order needs (Huitt, 2007).

These levels are essential regarding motivation as the lower degree involved needs should be fulfilled at a single degree prior to the subsequently higher degree involved needs occur leading in effectiveattitude. The position of edification is placed in the sphere of attaining high degree needs. Willingness of learners for learning cannot be chased unless, until lower level needs of learners were not fulfilled. In viewpoint of Erickson & Stommer (as cited Kenrick, Griskevicius, Neuberg& Schaller, 2010) there are some needs accompanied with those learners who enter in the classroom. These are arranged priority as;

- 1. Seek completion of a specific work.
- 2. They are in need of seeking novelty of experiences.
- 3. Perfection in skills is needed.
- 4. Need of overcoming targets.
- 5. Competence in work is needed.
- 6. Success and well-being are required.

7. Involvement and interaction with other people is needed.

It is essential for teacher to choose adequate strategies of motivation for the satisfaction of learners' aspiration.

#### 2.21.2 Learning Objectives and Techniques of Motivation

One of the most influential functioning of motivation is controlling and regulating the behavior of the learners. With the help of adequate strategies of motivation, learning objectives, attracts the teaching and learning activities. The strategies smooth the progress of learning situation and are helpful in the accomplishment of the learning aims.

The adequate strategies of stimulation can be selected on the grounds of learning objectives, information, comprehension, implementation and innovation(Hoadley& Ensor, 2009).

## 2.21.3 Learning Structures and Techniques of Motivation

In order to create the specific erudition structure and conditions, different teaching techniques are adopted. The learning activities are accelerated by the strategies of motivation. These strategies are energized by the behavior of the learners. The strategies of such stimulation of also initiate and sustain the learning tasks. Sharma also stated that that the adequate strategies for stimulating are chosen by taking into account the learning structure as they facilitate the condition of learning and learning tasks directly.

Need	Teaching structures	Teaching Objectives	Technique s of Motivation
Lower needs	1. Signal learning	1. Knowledge	a. Reward, Punishm ent
I. Physiologica 1	2. Chain learning	2. Comprehension	b. Praise and reproof
II. Safety	3. Multiple		c. Success
III. Belonging	4. discrimination learning		and Failure
Higher Needs			Extrinsic and intrinsic
IV. Esteem	1. Concept	1. Application	d. competiti on and cooperati on
V. Self- actualization	2. Principle learning	2. Creativity	e. knowled ge ofresult f. Novelty g. level of aspiratio n h. self- motivati on

Figure 2.4: Relationship between techniques of motivation, students' needs, teaching objectives and learning structures.

The selection of adequate motivational technique can be done by considering the demands of learners, learning structure and teaching objectives as shown in the figure. The teacher should provide motivation in such a way as to encourage for further efforts on the part of the students. The main attention of facilitating motivation is the

achievement of the learning objectives through enhancing erudition structures and to energize along with accelerating the behavior of students (Huitt, 2007).

## 2.22 LEARNING STRATEGIES AND MOTIVATION

There are many elements that effects learners' learning strategies. Learners adopt so many kind of approaches to grasp their learning. Their approaches to grasp learning of specific program or practicing some tasks are influenced by its background and as well as their motivation. Ausubel (as cited Hasnoor, Ahmad, &Nordin, 2013) explored that apparent and unambiguous learning is different from rot learning. He strengthen the idea that one of the most important element for reminding and learning is motivation for learners. This is as compare to that of deep learning in different from surface learning. But the idea is not as identical with three of frameworks that can be occur;

- 1. Firstly, there is a surface framework, in this framework, the main purpose of learner is just to regenerate the substance that is essential for the completion of their program.
- 2. Secondly, there is a deep framework. In this type of framework the major purpose of the learner is to acquire some one's own comprehension regarding the substance.
- 3. Thirdly, there is a strategic framework, it is to achieve success by using different ways and sources that are essential.

It is apparent that these frameworks proceed to different learning. A framework regarding a deep sense, proceed to different learning strategies which results in different ways. A framework regarding as surface level proceed to rote type of learning. Other framework regarding deep manner proceed to the learner examining evidence and establishing relation to their ideas in constructive manner. Lastly, a framework regarding to strategic framework will adopt what type of strategy they think that will be helpful in getting good results. The strategies learners adopt, have effect on their learning, rote learning on giving good outcomes in a considerable idea of realistic knowledge, but on the other hand, deep type of framework gives deep degree of comprehension(Mayer, 2002).

There are many elements that effects learner to learning. Some are very important and play significant role in learning are, learners' experiences that they had already gained (as also strengthen by follower of constructivism), the way of learning that they have already adopted, the way they perceive any task/work and its background. In view of Rams den(1988) learners' motivation is essential in learning but it cannot take the place of the style that learners adopt as deep framework of learning or opt to use surfaced framework of learning. The important factors which provide that deep framework are (Draper, 2013);

- 1. The learners should take the tasks and assignment as appealing and pertinent.
- 2. Learners should possess an option to select study methods for them: the more they will be dependent and free in their learning, the more they will be opt to do efforts to comprehend and grasp , instead of just following commands.

3. There should not be so much burden of work. If there is excess of workload then learners will find difficulty to adopt deep approach, they will just go for a surface level approach.

# 2.23 ACADEMIC ACHIEVEMENT

Academic achievement is presentation of a learner in specified field of substance regarding reading, understanding, language utilization, numeric, science, social studies, mathematics and rational logical argumentation that is evaluated by standardized tests, Academic attainment is referred as completion of specified results. It is also regarded as awareness of learners' abilities. Most of objectives of teachers are chased by measuring learners' academic attainment (Norday, 2004).

Lent et al., (1999) argue that in this world of great competition, academic attainment is a symbol of learners' future. An attainment is an imperative objective around which educational process revolves. Its position is of a major goal, that all the learners are required to work on it, in all civilization. An attainment is an important task. With the help of this system, young children are able to learn for their thinking skills and capabilities that are imperative aspects of creating desires.

Accomplishment and malfunction of learners regarding the specified subject can be traced out for the betterment of it, effectual strategies can be adopted. It is also helpful in giving us an approach to categorize learners on an apparent numerical scale in the fields of all the subjects.

While educating a learner, we keep into consideration one major objective that is their accomplishment. In what way accomplishment is measurable? Is it a matter of a person with strong mind? These are the old criterion. Some basic innovative approaches have been emerged now a day. Among these the MIT& The emotional intelligence approach are very important. It can be said that accomplishment is based on so many intelligences and on emotional command. Only IQ cannot be taken as the source of accomplishment. Only 20 percent age of share is of IQ in accomplishment. Rest percentage depend upon emotional and social intelligence. A number of article have been written in it. There are arrangements of workshops and conferences for the purpose of helping doctors (Epstein 1999): workers and managers to have the knowledge of elements of emotional intelligence, in such ways they enhance themselves. In case, emotional intelligence is a key for accomplishment in this era; then it is imperative to educate our learners about its elements at school level. If it influence learners' attainment, then it is essential for school to synthesize it in their curriculum. In this manner degree of students' accomplishment can be raised(Sharma, 2000).

## 2.23.1 Definition of Achievement

There are numerous definitions of achievement by different writers. One of the important is given by Steinberger (1993). In his view achievement is a blend of learning capability and hid working. It has so many dimensions. It is indirectly linked with human growth and advancement in the area of cognition, emotions, sociability and physical. It exhibits complete child. It is not merely a thing but this happened in different time and in

different level. It continue throughout a learner's life from the school level to higher secondary school level. It goes through whole practical life of individual.

According to Crandall & Rosen, it is a complicated process of success in achievement that is the resultant of so many components. In order to keep the knowledge of utilization of capabilities of an individual, it is imperative for him to take the guide line of expert trainers. To achieve success, an individual should be experienced, for that age is required(as cited in Shafiq, 2002).

To get advantage of broad and different activities, he should enjoy chances for the achievement in success, in any activity a boy can be fit in the role of male either he may give priority to adopt the place of female. It is essential for individual to fulfill the requirement of his profession whether he like it or not. Individual should have the ability to be autonomous. He should not rely on the advice, guidance or help of other to achieve the success. There are numerous factors that affect the complicated process of achievement success. The individual must possess guideline with the help of expert trainer so that he may be able to have the knowledge of his capabilities. He must possess the experience for that age is required. He should have the chances to amuse various tasks. One of the factor that contributes to attainment is the fact that the 1<sup>st</sup> born children possess higher attainment as compare to that of later born. They receive greater hinder of attainment of their parents. They possess the encouragement and best wishes of their parents. As there is an ideal relationship of parent-child, get more of their parents' guidance and help. They take their parents as model for them and they imitate them. This is very counting in their greatest attainment. Another factor that contributes to attainment

accomplishment are the past attainment of an individual. If a person is satisfied with them, it will shape one's behavior towards achievement. It is apparent from research that a personage's attitude is effected by past attainment. It is also counting the way person fulfill his requirement (Shafiq, 2002).

Individual from little families and from families where role of mother is dominant are highly motivated to attain. Individual from democratically controlled homes and possessing very good parent- child relationship is opt to attain motivation(Adams, Bowerman& Elder as cited Ajayi, 2006).

Motivation works positively in form of achievement as an individual take stress and pain. In order to overcome his stress and pain, he makes effort till he improves his work. Stress is in this sense regarded as positive characteristic until it keep a person involved in using his abilities to attain success. It is tremendous when the personage feel satisfactory with his performance. It is evident from so many lines of investigation that an individual's job is a source of satisfaction for him. It develops a sense of accomplishment, obligation, enhancement, acceptance and amusement for his performance (Huitt, 2011).

## 2.23.2 Characteristics of People with Strong Need to Achieve

According to Murphy and Alexander (2000), the three characteristics are as under:

**1. Personal responsibility for performance**: On hypothetical bases, it is ever supposing that subject high n-ach give priority to be responsible by themselves the presentation results as only by these situations, they have the feeling of

satisfaction in order to do something good. Horowitz (1961) strengthened this hypothetical supposition. Commenting is a familiar source of keeping information of the performance of the learners in meticulous task. It is strengthened by the other studies that feedback is imperative for them.

- 2. Preference of moderate risks: The cause of selecting an average complicated work is as the assignment is too much investigative about their functioning in a better way. In case of easy assignment, it will quiet difficult to analyze that they are successful due to their efforts as it is easy for all to perform it. Similarly if the assignment is difficult, it will not be easy to analyze their effort as they are not succeeded. So, they prefer to select average complicated assignment for the purpose of getting knowledge on the influence of their efforts regarding work/task.
- **3. Innovativeness**: In order to do something in good manner is actually a matter of performing it differently from previously done task/work. It also comprises a unique, short or efficient way to goal. High achievers are not old trodden path. All these characteristics show the individual who are in strongly desire/urge of achieving.

## 2.24ACHIEVEMENT MOTIVATION

Striving for success and to achieve, whether achievement is academic or professional in nature motivation would serve as basis for the behavior. Psychological literature mostly explain the motivation of individual to achieve as 'achievement motivation'. In the development of the field of research, investigator differentiated that meticulous organism possess a underpinning craving for the compilation of what are others not expressing because they are eager regarding their achievements with the passage of time (Carter, 2000;McInerney & Dowson, 2003; Murphy & Alexander, 2000; Pintrich, 2000; Thomson Zenzen, 2002). This section included every care in every aspects and thoughtfulness about which investigators possess perception of communities with remarkable degree of success that disclose assured physiognomies explained here;

- 1. It is a goal that go long way in erudition assignments which are combined aspects regarding further exercise and qualified to attain something that referred as attainment accomplishment (Murphy &Alexander, 2000; Yeung&McInerney, 2005).
- 2. Accomplishment drives have influence upon the advancement of arousing resolution (Wigfield & Eccles, 2002).
- 3. Stimulation for completion is the point of climax to put efforts regarding success. It also sort out variety of dimensions that are related to the success of personage in the presence of various events of erudition.
- 4. Mostly it is perceived that people who have achieved motivation, present threateningly developed level of evolution regarding their collaboration that compared to variety of people(Murphy & Alexander, 2000; Stipek, 2002). Schemas including evolution of individuals are deliberate efforts. They covers seven preparatory attempts.
  - i. The evolution is beyond considering speed differentiating is proficient for

the people.

- ii. Those who are adopting achievement motivation have understanding regarding specified uniqueness and individuality.
- Those who are involved in achievement motivation are attached with their positions, central characteristics and leading role in producing and in real life
- iv. Individuals who have adopted achievement motivation use practical applications in career of life.
- v. Enthused participants transfer the achieved attitude to their weird attitude, what an individual' inner perceive and his/her goals.
- vi. Person with highly stimulated behavior, acting with their companions in in order to achieve success a specified attitude of attainment.

It is the responsibility of the evolution for accomplishing with critical analysis for the advancement towards goals and good observation(Carter, 2000; McInerney and Dowson, 2003; Murphy & Alexander, 2000; Paul Pintrich, 2000; Thomson Zenzen, 2002; Stipek, 2002).

Lastly, awareness of movement is a permanent knowledge containing representation with the help of that accomplishment generates as a results of careworn and completion degree of intellect (Stipek, 2002).

A person's inner or internal and arousing endeavor that have ability to strengthen a person to follow force through which they identify to be passionate about and as a result attain their goal is regarded as attainment drive(Murphy & Alexander, 2000; Thomson Zenzen, 2002). The major embodiment's of revising the completion movement rose by the effort that David McClelland & Atkinson contributed in 1953. In their view point people with enterprise regarding supremacy on the basis of merely for completing and not for meticulous reimburses are very carefully planned to keep remarkable requirement for compilation (Murphy & Alexander, 2000). The advancement and revolution in the awareness of movement a "Onion-Ring-Model" in the field of attainment drive. It receives an ingredient of hodgepodge and mixture which implementable regarding achieving with energy. On the other hand, it found unconventional to analyzed like person's component of ratifying energy. Remarkably it jumbled up with gained irrelevant strategies as requirement for the completion is keeping common objectives of preeminence. This is based on the rules that rectifying movement are disagreed in front of the theory of broad ranged components of disposition that are paying attention on the person's endorsement (Murphy & Alexander, 2000; Wilkins & Kupermine, 2010).

Theories of attainment impetus thus provide a sufficient theoretical explanation for academic achievement motivation as it has common roots. Following paragraphs provide a brief description of theories of achievement motivation.

#### 2.24 THEORIES OF ACHIEVEMENT MOTIVATION

It is evident that all that there are assortment that prevails in the financial scenario of so many countries of the world. Psychologists pay attention towards these complexities and think over that they regard these issues as social ideas, political settings, delegation of authority and although their traits as philosophy and psychology. Person's psychology and financial growth problems prevail on the whole world are inter -related in which way? This crucial issue of financial differences of different people and psychology based reasons, creating such type of problems were traced by David C.McCleclland of Harvad University. He is of the view point that a person's psychological study and that of nation takes into account to grasp this problem. He is against this ordinary explanation of economic growth be considered as economic variable. In his view growth is effected by psychological and sociological elements. He wrote a book, "The Achieving Society" in which he presented his innovative ideas of economic growth of the nation. He exhibited in his book that only economic element is not sufficient for explanation and understanding of upbringing of capitalism. He is of the view that transformation in basic ideas and behavior of an individual give drive to economic growth in assured countries. In his view there is variation in individual regarding the power of achievement motivation. McClelland with his collaborator proposed the theory of achievement motivation. In view point of McClelland motive is a synthesizing of a transformation again through a signal and it seek for further transformation in future life and it has effect on many things. This explanation of motive has two imperative aspects. 1<sup>st</sup> dimension is related with synthesizing again that take the meaning of a psychological process that is in the mind and resulted by triggering off in an environmental situation. 2<sup>nd</sup> important dimension is signal that are reason behind the effectual arousal in the individual. For instance, if a boy sees his old teacher after a long time, the perception of the teacher works as cue which arouses affective feelings and the whole psychological process is reinstated. In short we can say that in order to motivate an individual there are two imperative elements environmental signal and effectual arousal.

He is of the view that all the human learned in the environment in spite of their nature(Chauhan, as cited Ormrod, 2008).

The central idea, background and influences of theories of achievement motivation are discussed here in detail separately;

## 2.25.1 McClelland's Theory

McClelland was highly impressed by Murray regarding the advancement of his requirement and demand for achievement theory. Although, there are unambiguous and specified qualities of McClelland's theory by itself. McClelland exhibited his point of view with Murray that the belief that the best way to achieve motives is to analyze fantasy. There are the fantasy of the person, as described on the place of his thoughts and association, provide us his factual internal consideration at the time when he is performing (Denzinger& Brandstätter, 2018).

In this scenario, he selects the use of the Thematic Apperception Test (TAT). In the TAT, imaginative stories are opt to write about subjects in order to respond to a series of pictures. The content analysis for stories is then made in order to achieving imagery n-Ach score by using co relational researchers in the scientific. McClelland explored high need accomplishment, as analyzed by the Thematic Appreciation Test, leads to expose the subsequent performing attitude.

- a) Average risk-taking as a part of art not merely a chance.
- b) Active participation and influential functioning.
- c) A learner by himself may be responsible for his work.

- d) Be aware of the consequences of the decision.
- e) Money is imperative towards that the whole process revolves.
- f) Eagerness of upcoming possibilities

McClelland in his afterward research minimized the top mentioned activities into three major behavioral characteristics. First aspect of these behavior is that it is the individual's responsibility to find solution to problem. Secondly, take achievement goal at a moderate level so that chances of risk may be minimized. Thirdly, person wants countable and meaningful feedback (Denzinger& Brandstätter, 2018).

McClelland described a number of researches exposing that there is a positive correlation between high need accomplishment and the consequences depicted in the above behavior and tremendous success. He is of the view that achievement motivation can be maximized. This idea of his approach to the enhancement of preparatory plans that are set to maximize accomplishment impetus in perspective and exercising business managers. The intention is to enhance the likelihood of business accomplishment and economic advancement (Collins, Hanges & Locke, 2004).

McClelland's line of investigation has produced a series of disapproval from so many different perspective. By the standpoint of financial development. So many questions arose on the grounds of many factors regarding the validity of his findings. These include biased data collection, evaluation and interpretation. Being a source of achievement motivation, McClelland's proposed TAT has to face criticism because of low prognostic validity and low test-retest reliability. Davis and his companions presented an apparent picture of achievement motivation (Murphy & Alexander, 2000).

This theory coherent that people belief for rewarding of undertaken with implementable situation in which accomplishment attempting is reimbursed and men with awareness persuade to rose by alliances (Murphy & Alexander, 2000; Zenzen, 2002). The commencement regarding meticulousness to reason for meticulous adaptation in action has anticipated by Robert Eisenberger. He competes that physical acquaintance of power is mostly painstaking that it may be accompanied with rewards. In light of this situation it clears that it takes place of a secondary underpinning. When there is need of minute application, the focus of a person is on showing minute hostile behavior for this accomplishment of objectives regarding erudition(Murphy Alexander, & 2000).Industrialization and financial evolution arc associated with Universality of apprehension impetus for the cause that people with high aspiration for completion are eventual to illustrate vocations that entail in the company of one's own regulating declaration building. Furthermore, it is related to person's social attachment. This upshot is proficient by the collected authentications that come transversely humanities the time by McClelland's group (Dowson & McInerney, 2001).

## 2.25.2 Atkinson's Expectancy- Value Theory

According to Atkinson (1964)state of achievement is a situation in which an individual has the knowledge of his performance that will be analyzed regarding some set of distinction. Furthermore, the results of his work will be in form of good analysis (success) or in form of bad analysis (failure).

Atkinson exhibited this scientific theory as achievement motivation theory. This approach is also referred as expectancy value theory. In his view point motivation or stimulation is exposed by three elements; the individual's ability and power to achieve success that individual has belief in him/her that there is surety of success, that he can do a certain task: the return of working in form of reward on the meticulous task. There is a relationship of multiplicity of the combination of three elements in order to explore the degree to achieve success.

Sometimes individual perceive the situation of achievement in a merely different way. The certainty failure, embarrassment and disgrace are the component of that situation. Facing achievement scenario like that create elicits anxiety, depression and fear of not achieving success in some of the individuals. Mostly individuals, who have a maximum motivational quality to prevent himself from failure (M) are capable of preventing themselves from achievement situation. As M go beyond M in an individual holding M having internal motivation towards an achievement scenario would never exists in an achievement scene (Arkes&Garske, 1982). So, positive extrinsic motivation is needed in order to cope with intrinsic motivation that perform negatively.

It is obvious that all the individuals keep both type of motive to some degree. Most of the research pointed out that Maf and Ms are personality traits that work independently (Brody, 1963; Litwin, 1958& Mahone, 1960).

According to Vroom(1964) this expectancy value theory has its linkage with that of the achievement motivation theory and attribution theory(Vroom, 1964; Porter & Lawyer, 1968). This theory indicates that effort is a major result of motivation that can be measured and analyzed. There should be two important conditions:(1) Giving the work weight age and (2) Hoping for the success in the work. When we apply this approach to library and communication art instructional scenes, the skilled librarian specialist exposed the work in a manner that (1) keep busy and important to the learner(e.g., applying communication skill, guidance to class work and (2) up bring expectation positively for objectives (e.g., presenting copy of successful task done by other learners at same).

## 2.25.3 Spence and Helm Reich's Achievement Theory

Spence and Helm Reich in 1983 gave an approach regarding attainment impetus that is comprises of three proportionally added features to the typical trainee.

- 1. An understanding of satisfaction with respect to trainee's hard work.
- 2. An intellect for summing tip of satisfaction with , adopting an occupation as with the passage of time one is amused by getting a job altogether.
- 3. An awareness regarding appeal for something and hating something is associated with completing task by rules and regulation, compilation, manage assignments, fulfilling responsibilities, healthy struggle or some other type of competitive situation of matters that has relationship with a frequent sagacity of competition of any person(Murphy & Alexander, 2000)

These three discussed features regarding a person are analyzed and evaluated by a Work and Family Orientation Questionnaire (WOFQ) which was designed by Spence& Helm Reich. These factors intended to one's attainment. As the people are in state of competition but they lose degree of enthusiasm for achievement and mastering it then they possess opportunities of grades and pays as compare to other. The reason is that they perform in state of high competition then their function badly affected. Then people reduced the order of work as compared to other regarding of an explanation which is increasingly vicious dweller may spotlight so greatly in the state of competitiveness rather than on accountability regarding a hi-duty that they would perform (Dowson &McInerney, 2001).

## 2.25.4 Bernard Weiner's Attribution Theory' of Achievement

In his approach, Weiner in 1985 had put foundation for a major solid origin and idea regarding attainment impetus come with different feature of impulses(Carter, 2000; McInerney & Dowson, 2003; Murphy & Alexander, 2000; Pintrich, 2000; Thomson Zenzen, 2002). The present theory exposes the idea of achievement motivation and provides a framework for identifying explanations for achievement, accomplishment, and malfunction.

Initially among the advanced psychologist, Heider (1958) was the first who expressed his viewpoint regarding the common people about calamities, what are causes and attributes. During 1960, so many researchers have been conducted to find the cause of motivation of someone to achieve and the reason of someone being not motivated to achieve.

In views of Weiner(1980) attribution theory exhibits that these are the characteristics of people who are high on achievement motivation.

i. Such people are inclined to work for the assignments that are necessary for success instead of avoiding these tasks. They are of the view point those higher

capabilities and hard work are necessary for success. They have trust upon the fact that the main cause of malfunction is terrible fortune or meager exams. They do not feel guilty for their failure. So, failure do not have negative influence on their self-esteem. But on the other hand, situation of success up brings pride and confidence.

- When these people found complexities and a toughness in their work, they keep it up instead of leaving it. It is supposed that failure is the result of absence of working hard.
- iii. Such people who are high on achievement motivation, choose targets that requires medium approach in applying efforts (as setting 50 percent age criterion for success) as it is good to get the response from those assignments that provide them knowledge regarding their abilities to do very complicated assignments in spite of easy assignments that depicts less regarding their capabilities or influences.
- iv. Such people complete their tasks by using high level of energy. As results showed that person doing task by using low level of energy are low on achievement motivation.
- v. Such people with high need achievement motivation prevent themselves from indulging in success related assignments and task as they are inclined to (a) doubtful regarding their capability and/or (b) they suppose that accomplishment is matter of fortune or to "who you know" or it is dependent of other elements that are not in their control .So, they get success, in spite of it they are not motivated and do not consider their success as reward. As they do not consider

themselves accountable for their success. They do not effectively add to their arrogance and self-reliance.

- vi. Such persons having the characteristics of high need achievement motivation quit on facing complexities. In their view failure is due to deficient in ability, as they are not able to do anything.
- vii. Such persons select easy or very difficult task to perform as consequences, show in a very minor way about their bad performance.
- viii. Person with high need achievement motivation do not perform his work with passionately as consequences will be consider as the fruit of their efforts.

# 2.25.5 Achievement Goal Theory

An idea that is linked with a person's condition of irregular mastery directed by

emotion is referred as achievement motivation. It is also collaborated with physical contentment, praise and a desire of attainment of a reward(Murphy & Alexander, 2000).

In the field of achievement motivation, goal theory has distinguished three separated kinds of goal visa Vis; mastery goal (also baptized as learning goals). Its focus is on obtaining expertise or making mastery of new pattern of information or abilities. The other are performance goals(also baptized as ego-involved goalmouth). They concentrate on attaining essence which is grounded on norms, trying to do best as compare to others or shows good performance regardless of doing much efforts. Lastly, there are social goals. They considerate interaction of individual(Urdan&Macher, 1995). The ideas depicted by goal line of approach is that people are put into the situation of

motivation, to keep them away from failure(as it is related to performance goals) or they have to attain accomplishment (as it is related to mastery goals). As far as prior situation is concerned, the people are opt to choose less complicated or severely complicated work/assignments which will achieve accomplishment or finds reason for occurrence of failure. The scenario portrayed afterward depicts that people are opt to choose work/assignments with medium form of compilation, then it will become a target of learner's great interest, although it constantly possess the high level hopes for accomplishment (Nicholos&Throkildsen, 1995). Mastery goals are related with expertise and an increase of information and comprehending by putting efforts in learning(Murphy & Alexander, 2000). Those learners who opt for goal have achievement customary that are developed by themselves. They perceive success in shape of mastery and learning. Learning and motivation is affected by mastery goal in a positive way. These goals are interrelated with highly cognitive tasks, self-efficacy at higher degree, see to get target and problem solving(E. M. Anderman, Maehr, & Midgley, 1999). Performance goals referred as a wish to obtain positive judgments and leave unfavorable judgments of an individual's expertise and their worries (Murphy & Alexander, 2000). Major role of performance goals are to take success as a performance regarding others. Attention towards the success and leaving it (Elliot & Harackiewicz, 1996) depicted in this explanation of goals attracted the focus of researchers. Goals that are chased by performance are linked with higher degrees of achievement. But these goals are of normal level of learning and captured the attention of extrinsic reward(Midgley, Kaplan, & Middleton, 2001). If, an individual avoids performance goals, their effect on achievement regarding behaviors are negative. This prevention from performance goal

cause wrong processing, poor withholding, and self-flaw full hand techniques as delay in decision and refusing to take others help(Midgley&Urdan, 2001).

Idea regarding attraction towards success and leaving it, especially, in case of performance goal, has attracted to the attention of researchers. They also focus on the development of research tool for reflecting this success(see for example Midgley et al., 2000). There are also facts reflected by studies in which quantitative data is used and inductive analysis is done, do not showed by that attracting and learning of success by performance goals. In views of learners, these are grade goals that learners wish for achieving good results and take reward that is interrelated with tremendous performance. These goals reflect a wish for showing their competence, but this is not related to others. In view point of Brophy(2005), attraction /leaving success through performance goals are a "low incidence phenomenon" as individual now and then as individual unexpectedly presents performance goals with communal comparison when depicting causes for attainment. Urdan & Mestas (2006) also strengthen this idea. In their view point researcher miscalculate exaggeratingly the natural happening of mastery and performance goal in meticulous scenario. The causes of individual learner's engagement and wish for attainment at school are also looking for causes in spite of competency. Miller (2001)also explored learner's point of view regarding goals which comprised of social comparison.

Although an exploration that was accompanied with the achievement aspiration procession had exposed that distinguishable adaptations in temperamental procession configuration had direct relation with amended motivational successions and circumstantial supports (Dowson, Barker &McInerney, 2003; Murphy & Alexander, 2000), The completion deportments of descendants as a result promote acclimatize completion theories in undertaking position and squeeze maladaptive realization devices in ego-engrossing state of affairs which establish a supple productive attachment within a discrimination of assignment distressing stimulation involved atmosphere or communal stimulation involved succession which gave an accountably the research of Ames & Archer (Carter, 2000; McInerney & Dowson, 2003; Murphy & Alexander, 2000; Pintrich, 2000; Thomson Zenzen, 2002). In contrast, discrimination of high ego level fixation were negatively linked to the elements of a person's attainment. The discrimination of high level assignment fabulous covering was a counting predicting element of plentiful series of attainment in substantial tutoring like innate thrust, concentration in the self situation, on the surface appearance of the experience, an admitted advancement normalize goal for outstanding fortitude and purpose for participation in the whole somatic edification related set of courses(Murphy & Alexander, 2000).

The observations showed that tangible setting of edification is dependent of addressed to teaching space instructors. It was disclosed that erudition exposure with the influence of application by awareness regarding method which enhanced eagerness in the person. Explanation regarding this can be made by investigating about the ego directed people as without the delay of powerful credibility of awareness in somatic educational process by which they keep high competence to perform assignments/task(Carter, 2000; McInerney & Dowson, 2003). In accumulation, high level of assignment/work inclined trainer were threateningly have high expectation to keep beliefs about accomplishment which can be chased through innate concentration in form of disordering, collaborating and extra ordinal fortitude as compare to small work inclined students(Carter, 2000;

Pintrich, 2000). By concluding all this, high work/assignment self-esteem trainers have the very few potential for conviction an attainment firm that comes through erudition instructor (Carter, 2000; McInerney & Dowson, 2003; Murphy & Alexander, 2000; Paul Pintrich, 2000; Thomson Zenzen, 2002). Similar lines of investigation established with the attempts of Papaioannou, Duda & Walling in 20th century. They recalled a positive attachment with a work configuration and innate concentrations regarding youths' somatic schooling. A central position where classroom environment is important wants technically enhancement which aids educators in interacting work/assignment regarding achievement situations. Such type of approachable affirmations disclose that these viewpoints brought up eagerness and it might strengthen the current issue that is complaint regarding attainment in the starting of people to appeal in somatic setting (Murphy & Alexander, 2000). It is possible to comprehend the behavior of accomplishment or completion of a person with the help of a variety of lines of investigations of meditation of staff regarding person's stimulation like; (Carter, 2000; McInerney, I McInerney & Dowson, 2003; Murphy & Alexander, 2000; Paul Pintrich, 2000; Thomson Zenzen, 2002; Tisome Nugent, 2009).

- 1. first-class or selected approach of personage
- 2. Participation stimulation of personages
- 3. viewpoint of irregular concentration
- 4. realization passion
- 5. propensity stimulation
- 6. anticipation design
- 7. view point of observational erudition

## 2.25.5.1 Personal Mastery of Achievement

The assumption regarding superficial ability is amongst the frequently prevailed mental and emotional variables which are obvious by motivational campaigner in physical contexts of the individuals. The major attention about the true life is associated with quality of perception, sentiments and interaction of predecessors and imperatives of impulsive degree of acknowledged ability of the person regarding their own(Dennett, 2000; McArthur & Baron, 2000; Murphy & Alexander, 2000).

There are a couple of starter of ability categorize like an incongruous irregular viewpoint of accomplishment that is settled into a couple of orthogonal achievement direction towards goals. Nicholls in 1984 deal with them. These two goal line configurations are linked with each other that is promoted by the person. In response to them, the focus of persons divert to objectives regarding the ambition procession of attainment, glinting the one's self approach of success with the help of specific achievement context. He established bond in assignment and personal figure will be verbally used as a couple of goal configurations regarding the person. A person is inclined to work/performance behavior which take the advantage of an impossible to differentiate beginning of ability that concentrated on evolving supports, intellect novel capabilities and shows an exemplary command over the task/performance (Murphy & Alexander, 2000; Pintrich, 2000; Thomson Zenzen, 2002). The remonstration regarding ability is based on continuously going fortitude and one's personal related temperament of any one. Apparently, any person having self-regulated personality usually utilizes an isolated instigation of ability that is interrelated to the inclination which is result of actual

world, in addition to very less effort and overtaking all other people(Carter, 2000; McInerney. 1997; McInerney and Dowson, 2003; Murphy & Alexander, 2000; Pintrich, 2000; Thomson Zenzen, 2002). When a person has awareness regarding his/herself behavior that focus on accomplishment, it will be resulted in commanding high degree of accomplishment. One's commanding on accomplishment due to his/her own capabilities is a matter of one's understanding the facts in their purposive manner. It will be the source of clarifying and dependent upon one's own vision. By the help of this capability, they have power of focusing their strong/ weak points with developed patience (Sege, 2012). It goes a long way towards one's competence and skill. This is not the matter of their dominance as it is one of the specific proficiency that enhance their innate awareness, possessing inventive nervousness, making distinctive nervousness and restraints, a responsibility to fact and utilizing with the help of one's own competence to understand this one of the central part of this ability can be taken as commanding one's self(Sege, 2012). It is not possible to understand separately a personal or bona fide hallucination from the belief of purpose as purpose possess an intangible clarification but on the other hand, hallucination has tangible clarification(Sege, 2012). Vision is regarded as mile stone which leads to destination. On the other hand, purpose gives dimension to erudition. These two combinable results when a person possess a capability of tension creating. Creation of tension occur when vision is odd from the current facts. will show the destination of the individual while purpose is a direction of learning and both are only produced when an individual has a capability to hold creative tension. Creative tension is produced when vision is odd from the current facts. This happened as it take place like a gap between the goal and current reality which may cause negative

sentiment. It cause individuals to commit to develop one's self exercise of commanding. This occur due to strong focusing of individual regarding their wishful consequences which are interconnected to their vision. This is apparent that focus of individual is on wishful intrinsic consequence is an art which require time and hold on to inculcate it. This also needs discipline. As a result this form of ongoing practice or erudition becomes source of one's own commanding(Peter Sege, 2012).

Summing up all this with the help of review of various specific degree regarding attainment impetus, this is apparent that one's specific drives are settled accordingly when edification is applied in theoretical; form and crystal clear way of holding things (Murphy & Alexander, 2000; Pintrich, 2000; Thomson Zenzen, 2002). One of the work seeking individual's behavior lies to bases in the belief of continuing edification which an individual's guarantee to humankind and desire to longing to tolerate intellect would be considered. While, personal perception configuration is linked with the credibility that process of teaching and learning is a way to some destination and has its relationship with affluence and brought up one another's reputation (Murphy & Alexander, 2000). An upbringing of development regarding this discernment having potential is apparently a succession of discriminating, the ideas of good judgment, putting forth intense effort and a resilience related to a person which has bases on surfacing task of children (Murphy & Alexander, 2000; Paul Pintrich, 2000; Thomson Zenzen, 2002). As a result, people will deviate the beginning of attraction for which they exercise. It is build up on their irregular approach of awareness. This approach has interchangeably selected that the supplementary ego attentive people have standardized attraction and they may put efforts to make superiority as compare to others considering the fundamentals of accomplishment (Carter, 2000; McInerney &Dowson, 2003; Murphy & Alexander, 2000; Paul Pintrich, 2000; Thomson Zenzen, 2002). If we see on the other side, the supplementary task learning person is dependent with the fortitude, knowledge of a person and efforts to seek novelty of aid in instructing and erudition procedure(Dennett, 2000; McArthur & Baron, 2000; Murphy & Alexander. 2000).

## 2.26 MODELS OF AHCIEVMENTS MOTIVATION

Helmreich & Spence (1974) exhibited a representation of accomplishment impetus on the grounds of the desires with the intention of avoiding outcomes of accomplishment that occur negatively, working hard, seeking intellectual challenge, and be successful in a scenario of competition.

#### 2.26.1 Social Cognitive Model

This representation of accomplishment impetus has its linkage with the presenting in meticulous scenario. This representation opines individual's belief and recognition regarding their personal. They are also related to their belief and intellect regarding the contextual influences towards goals and experiences of accomplishment. As in response, goal- direction and experiences influence intellectual techniques that are the consequences of different performance(Hervard Education Letter, 2000). Bruce W. Tuck man proposed a model of motivation which is applicable in various setting. There are three common inconsistent factors that attract the attention of this model.

- 1. Attitude or belief that persons possess regarding themselves. The abilities they possess and the component s that are meaningful for their outcomes.
- 2. Aspiration to accomplish a consequence stands on the worth people place on it.
- 3. Methods and techniques that person apply and adopt to attain the outcomes they desire.

Attitude, aspiration and techniques, explained in this model, show a remarkable but interconnected addition for achievement motivation. In the absence of attitude, there is no cause to keep trust that a person has sufficient abilities to achieve, then there is no cause to put effort towards the tasks. Similarly, if the aspiration are absence, there will be no force that push persons to work. Lastly, if the techniques or methodologies are missing, it is difficult to choose and guide essential (Turkmen, 1999).

## 2.27 DEVELOPMENT OF ACHIEVEMENT MOTIVATION

There are so many factors at home, school and society that play role in the development of achievement motivation. Creation of attitude and motive is mainly affected by home for the initial training of the child. Need for high achievement of motive for the child in his life occurs when parents have expectation from the child. They may guide their child. For the development of achievement motive, society and its

social philosophy also play their important role. Some of the societies here, are attracts toward achievement oriented. In contrast, there are some other communities, that have belief on luck and they thought that all is from God. Mostly the age of a child to get 1<sup>st</sup> admission in school is 5 years. As coming to school, the individual has collected so many experiences that become the part of his individuality and from his behavior regarding life, in spite of this school has an imperative impact on child to sharpened their previously received experiences and develop positive attitudes in child. In order to develop achievement motivation in children, teacher can play their important role by adopting the following method.So, that every individual should feel that he belongs to a group (Chauhan as cited Brunstein and Schmitt, 2004).

- The teacher should realize the significance of achievement motivation in one's life process by different methods including telling the tales off historic people and their achievements from different lifestyles. When individuals are already willing to belief that it is and will be imperative to develop achievement motivation, then the efforts of the trainer will be positively affected in form of success.
- 2. The teacher should arrange the inside and outside of the class in order to create a congeal environment. The teachers' attitude and their active participation with great passion play major role in order to create congeal environment for achievement motivation in child.
- 3. It will be a success of the teacher in his efforts if he get the willingness of the children regarding the belief in them that develop a novelty of motive is factual and appropriate.

- 4. It is teachers' duty to make a relationship of motive with that of the future life of the children and hand over tasks to do independently.
- 5. The teacher should inculcate in the minds of the learners that this novelty of motive will enhance their personal reputation.
- 6. The teacher should make clear that their novel motive is a form of enhancement of established civilizing ethics.
- 7. The teacher should developed in learners the sense of commitment and responsibility to achieve solid and simple goals of their life regarding motivate that are recently developed.
- 8. The teacher should guide and gave instruction to the learners to maintain a proper proof of their accomplishment towards their goals.
- 9. The teacher should emphasized the learners to develop the habit of self-study.
- 10. The teacher should utilizes his attempt to create advantageous social atmosphere in the classroom. Thus, a sense of belonging to a group prevails in learners minds.

# 2.28 TEACHING OF ACHIEVEMENT MOTIVATION

It is possible to induce achievement motivation in the individual by applying specific teaching technique. This technique persuades obligations to fundamental communal belief like freedom, receiving of one's own duty of confronting the outcomes of his performance and making efforts to handle surroundings competitively in accordance with the standard of excellence (Chauahn, 1978). The most important feature of this teaching technique is to make the individual realize that his action should be in a positive direction and all his activities should be aimed at mastering the environment

according to standards of excellence. The teacher, manager or administrator interested to induce achievement motivation in other needs to follow the following six steps(Ball Samuel, as cited Zenzen, 2002).

- (1) Focus attention on what is happening here and now.
- (2) Provide an intense, integrated experience of new through action and feelings.
- (3) Help the individual make sense out of his experience by attempting to conceptualize what happened.
- (4) Relate the experi3ence to the individual's values, goals, behavior and relationship with others.
- (5) Stabilize the new through, action and feelings through practice.
- (6) Internalize the changes.

# 2.29 METHOD OF INCREASING ACHIEVEMENT MOTIVATION

In recent years, extensive achievement motivation training programs in education contexts have been undertaken. Alschuler accompanied with his followers and McClelland have outlined a number of codes of procedure of contents. In a meticulously demarcated way, a range of procedural paces in order to be following for working on it.

To train in the area of accomplishment impetus strengthens obligations for primary communal beliefs. These values and beliefs includes freedom, taking one's own accountability for the outcomes of an individual performance and making efforts energetically to grasp the surroundings in accordance to standards of excellence. Entrepreneurial role responsibility is developed through justifying and marking bunch of accomplishment through training of the element of accomplishment arrangements, by establishing relationship of these to the way of impression (average risk handling, enterprise, utilizing tangible comments, go forward with great care) and through trying these belief and action to adequate living context(Entrepreneurial -type situation).

These goals may be accomplished in various ways .It is possible to train the contests to attain their own TAT stories. As a result they are able to interpret their personal abrupt thinking along with interpreting newspaper, perspectives, traditional stories, and talks, their crucial assignment is to apparently idealize and mark accomplishment impetus thinking. The impression giving manner is the training of giving impression is given sports simulation in which performance is molded and is of worth. Contestant can do exercise and came to know the result of performing tasks according to the rewired expressive ways in a scenario having realistic world's consequences are relaxed so that to allow experimental erudition technique of discussing in a group is helpful for the occurrence of performance in nature upbringing of the accomplishment by the patterns, by the evaluation of case history, lectures by competent person and dialogues of the apprentices of a person's living scenario, achievement facts and performances are related to natural world backgrounds.

Such technique, which have a good deal in common with so-called psychological education course normally consist of four characteristic types of procedure. Different subjects are taken to keep as imagination/fantasy by acting different things on granted.

By looking at the content of these courses, accomplishment that individuals imagined are interconnected to factual world. For all these settings different projects are planned and undertaken. Processes of such type are the source of ignored dimension of personality.

Second, nonverbal action, meditation, and the exaggeration of spontaneous body movements are encourage through a variety of games. Understanding psychological concepts is often facilities when such concepts are learned meteorically rather than simply comprehend. Third, the way individuals feel are of the important value instead of the way they think. In order to give strength to the people, there is intensity in the inculcation of group feelings. The capabilities of having a complete series of feeling is a considerable to organism's strength that inculcated in adult. This approach is based on the idea that affective involvement increased valuable erudition and that the capacity for the full range of feelings is a crucial human potentiality often underdeveloped in adults (Jagacinski, &Duda, 2001).

Fourth, the importance of living fully and intensely her and now is emphasized. Courses may be held in retreat settings which cut people off from past obligations. The isolated resort settings dramatize the here and now opportunities as an explanation for behavior, and reference to the past and future are considered escapes from the present's opportunity. The assumption is that if a person cannot change in a situation where the conditions for growth are optimal he is not likely to continue growing outside and after the course (Meece, Anderman, & Anderman, 2006). Such technique in general aim at the growth of a healthier more sensitive multilevel communication the integration of irrational fantastic into constructive responses, and greater capacity for ecstatic emotional experience. A person who has developed sensitive non-verbal communication is less likely to express himself hatefully of violently (Alschuler, 1973).

These General procedures are elsewhere translated into more specific guidelines. Alschuler, Tabor, & McIntyre (1970) present and explain six basic steps to follow in teaching achievement motivation. These considered in turn are as fallows.

- (1) Focus attention on what is happening here and now.
- (2) Provide an intense, integrated experience of new thoughts, actions and feelings.
- (3) Help the person make sense out of his experience by attempting to conceptualize what happened.
- (4) Relate the experience to the person's values goals, behavior, and relationships with others.
- (5) Stabilize the new though, action and feelings though practice.
- (6) Internalize the changes.

Getting attention is mainly a question of creating moderate novelty, avoiding extremes of old routines and extremely unusual experiences. In one situation, this environment was achievement was achieved though recruiting subjects from the full spectrum with a school, this suggesting that the program was something new. Sometime only portion of volunteers are selected, to give the program added value by making it special. In recruitment typical results of achievement motivation training, testimonial of respected people, and stressing the characteristics of highly achievement motivated people all help to create favorable, moderately novel expectations. Efforts are made to avoid allowing the training program to become just another lesson, such as by having the class meet at special time, using special labels for the group, avoiding traditional-looking classrooms, and making use of retreat-like situations that create separateness and that are conducive to warm interpersonal relationships (Dennett, 2000).

## **2.30 ACHIEVEMENT MOTIVATION AND BEHAVIOR**

Persons who acquire the above degree of accomplishment impetus are opt to arrange targeted goal and then they put their effort to obtain these goals. Feedback is important, for such people. They give it consideration to this feedback in order to evaluate their completions. They are desirous to have self-efficacy to keep them busy in a work as it is their belief that they can master it and chase the success. Accomplishment impetus is perceive as an imperative quality of the person and effects task attitudes at some degrees. Although, the extent to which person possessing fundamental achievement motivation presents a behavior that seek towards achievement. So many factors influence it (McArthur & Baron, 2000).

High in need achievement persons are in favor of working on medium approached challenging work, as chances of success seemed to be high. They are not in favor of working on simplest and straightforward things as they do not found any challenging situation there which do not satisfy their achievement need. They also have no wish for putting their efforts on complicated work/assignments, where they do not found success at high level. So, we can say that people who possess high n-Ach are pragmatic in choosing and completing their professions and fields. In fact, in this way they want to establish a good suitability and interrelationship between their capabilities and qualities and all that of its requirements(Dennett, 2000).

High in need achievement persons are in favor of doing work in such settings where their performance is equitable and comparable with other persons. They are in favor of feedback regarding their performance should be given to them. High in need achievement persons is in favor to determine in performing on the work/assignment, which in their perception and view point related to their career or those seemed to be showing those personal qualities (For example intellect)that are helpful in progression. When high need achievement person achieve success, they keep their degree of aspiration high in a factual manner, as they will proceed towards a little bit more tough and complicated assignments/work. Persons with high need achievements, are in favor of working in such environment, in which there are situations which are control able for them in order to have grip over the consequences. They do believe on working a situation (Vij, 2000).

# 2.31 RELATED STUDIES REGARDING TEACHING STYLES, LEARNING STYLES AND ACHIEVEMENT MOTIVATION

The study examined by the Puja & Ahmad (2016) in which research diagnosed that, dominancy of learning and enhancing methods regarding the history student's

education. This discourse used the Myer-Briggs type of learning style as an indicator which is respectively explained as, extrovert, sensing, intuition, thinking, feeling judging and perceiving. The study based on the Sample of 600 students apparently from class second year in 2012 and from class third year of session 2013. This area of study was world emerging universities of History studies respectively for this regard, the University of Jember & University of Bandung Indonesia's apprentice sample is being evaluated by the researcher. The nature of this study is descriptive and further SPSS tool has been used by the researcher for analyzing the portion of data in chapter of data analysis. However, research results described that, the learning technique at higher level is been promoted by the teachers for better understanding. However, researchers proposed the implication that, this sort of learning makes and reshapes progress at higher level. For better understanding and evaluation, the policy makers follow this method for initiating progress at this level.

One of the line of investigation regarding teaching styles and adolescent's psychological development was conducted by Khurshid & Aurangzeb (2012).One of the major objective of this line of investigation was to explore different teaching styles. A sample of 130 students and 45 educators from three intermediate level colleges of Rawalpindi Region were taken as the sample of this line of investigation. This line of investigation was based on the theory of Grasha Teaching style. Major findings were that personal model teaching style is most prevalent teaching style. Moreover, this style has positive correlation with adolescent psychological development.

The study of well-known researchers Simelane & Mji (2014) proposed technological development at the strategic levels for better progress. The researchers examined that, "technology-engagement teaching strategy" (TETS) which triggered the exposing level of learning of students in Mathematics. Further, for enhancing better progress, the researchers timely and repeatedly assessed the participants' engagement with technology and its impact on their minds. However, after analyzing data, researchers diagnosed that, the relevant operation of TETS with Aid of Clickers drastically improved the apprentices' learning progress.

The researcher Syofyan & Siwi (2018) designed study in which they explained the learning habits of Economics students. Their review regarding literature explained that, learning styles repeatedly makes volunteers impacts on apprentices' progress. However, Researchers gathered data from 100 students as sample of the study and research instrument (questionnaire) was designed for collecting data from selected sample regarding the learning styles and its impact. In this regard, researcher evaluate that, the students of "economic education students" deeply prompted and vary familiar with visual learning style which is dramatically boosting their learning capabilities.

Further, the study of Shiekh & Mahmood (2014) designed the study regarding the "Teaching Style of the English Language Teachers" however, they also diagnosed the impact of number of styles which are forcing and encouraging the level of English language student. Moreover, research evaluate that, every teacher have different learning style, philosophical approach and understanding regarding the styles of learning. It is universally accepted that , styles always draws impact on students capabilities and level of understandings. The Interest building and consistently engaging the attention of student is tough challenge for teachers while they are teaching English at the middle and

medium level. However, with reference to Pakistan's Education system, English is compulsory for Primary, Secondary, Intermediate and Bachelors classes. Due to the harsh and traditional teaching methods, most of the students in Pakistan are stuck and dislikes this most sophisticated and revolutionary language. For this, the researcher in this study raised important points as (a) it's important to investigate the level of engagement and motivation peak of students towards the learning style of English. (b) However, to examine the appropriate methods of teaching style regarding English language learning methods. Further, that study was also delimited to 10 prominent English teaching schools of Pakistan. They selected 20 teachers as sample of the study and also students from their respective classes where they are teaching was also included for understanding the level of encouragement and motivation regarding the learning of English at secondary level. For collecting data, the instrument "Know your method" and "English Level Motivation" have been used for exposing their style of teaching and their method which appearing students and motivates them for learning the English at this level. The Data was interpreted and analyzed while using most sophisticated social sciences tool SPSS. The study investigated that, the prominent and very ducky style of teachers were "Delegator" which is basically appearing and forcing students for learning. Moreover, next two styles which were used respectively were "Expert" and "Role Model" which both empowers teachers and grants central role to teach.

For the purpose of setting the enhancement of erudition of apprentices and their behavior which suits them, the line of investigation concerning about the very important aspect of leaning and behavioral change of students, the study was designed by the Khandaghi & Farasat (2011) which is being organized for underlying the concept of two types of learning. For this, research instrument teacher and students were being examined by researcher for understanding the student's emotional, educational and economic progress. The teacher used sample size of 300 hundred students and 500 teachers for knowing about their level of engagement with social, emotional and political level. The research diagnosed that the, those teachers whom used active style their students are very familiar with learning and very adjust with social sector while those used Inactive style their students mostly less active and less familiar with social issues. The result shows that, all this happens and based on style of learning. However, researcher explained that, there are huge differences between active styles and Inactive style which as being used by teachers for social and emotional learning. But it has been proven that, Social adjustment is significantly progressed in both styles of teachings.

Ilçin, Tomruk & Yeşilyaprak (2018) diagnosed about the learning style and academic progress to understand about the progress of physiotherapy students. The line of investigation inquired the influence of erudition style on understudies progress. For this instance, the learning style of 184 student of physiotherapy is being evaluated by the researcher while adopting the method of "Grasha-Riechmann Student Learning Style Scales". However, CGPA scaling is being used by the researcher for scaling and measuring the level of progress. The Kruskal-Wallis test was used by the researcher for conduct of learning style groups ("Independent, Dependent, Competitive, Collaborative, Avoidant, and Participant"). It has been diagnosed that, Turkish Physiotherapist student are most dominantly attached and familiar with "Collaborative Learning style". However, it has been investigated that which style is more active and advance which draws impact on the minds of students. The teaching style on Turkish students is very drastically increasing the progress of students whether the researcher reported that, the area where teaching style is used have more better progress as compared to other blocks in Turkish Schools. The research explained that, this study is being used for understanding the nature of style which draws impact on students' minds. However, it has been proven that, numerous learning styles reshapes and boosts progress of students.

The study of Ridwan, Sutresna and Haryeti (2018) in which teaching styles and learning styles has been examined. However, the correlation of this study exposed that, the 15 teacher and 188 student's simple random sampling technique used. However The SAILS and VARK questionnaires style is applied for analyzing the ways of instructing and erudition via online methods of learning. In this line of investigation the frequency and percentage were used. Furthermore, for the analysis of data, chi-square and Mann-Whitney analysis were being used for analyzing the study. However, many of the teachers highlighted the "Single-Modal teaching style" with Kinesthetic (K) preference, further the student chosen "All-Modal (VARK) style". However, it is being evaluated that huge difference was found between ways of instructing and ways of erudition. So, it has been accepted that, the teaching style sometime doesn't workand teacher should adopt more than one style while students also adopted the student learning style and keep updating its learning abilities. This will initiate and make progress most effective and advance and boost progress of adaptation and it's very generous for classroom progress requirement. If we see deeply, we observe that these three variables of the present research study, TS, LS and SAM, revolve around the need-press theory. This theory has been popularized by Pace and Stern(1970). This is a theory of person-environment congruence in which complimentary contribution of personal need and environmental

press can enhance students outcome. Chatterjee and Ramesh (2015) have also used this theory in their study in the form of Person –Environment Fit for linking teaching styles and learning styles as a measure of person environment fit to assess students performance. Different research studies have been conducted to find out the

interrelationship of TS, LS and SAM(Khalid, Akhtar & Hashmi;2017). A number of research studies existed in which researchers have examined the effect of TS, LS match on students' academic performance(Aripin,2008;Collison,2000;Felder,2002; Uzuntiryaki,2003). A line of investigation conducted by Nasir and Aneela (2014) have bases on the fact that one of the source of motivation for apprentice's of English is the TS of their teachers. This line of investigation has its root in the self-determination theory. This approach is very much effective in motivational field. In the view point of Deci and Ryan(1985) this motivational approach is a role model which is one of the helpful source on the part of learner for understanding the connection of behaviour and motivation. The main idea of this approach states that human being are active living being, they have innate power of development and growth. They have ability of taking risk and handling challenging situations. They have power of relating their experiences, by their self. This development is not somehow automatic but have social influences. Teachers TS are influential and helping aid for apprentices' LS. This combination of TS and LS influences their self-determination for erudition. Secondly Nasir and Aneela(2014) took attribution theory for achievement motivation. This approach depicts that in what way human beings see the situation that is going on in their surroundings. It makes clear that in which manner human beings reflect and express their attitude and thoughts of these situation. The focus of this theory is to know about the causes of actions of people. In the field of motivation this approach is liked by many people. With the help of casual attribution this motivational approach becomes a source of link

between apprentice's previous experiences and their incoming efforts . According to this theory apprentices make their previous self experience as a source of forthcoming life objective. According to this approach person's previous failure leads to his/her achievement of objectives. A person's achievement depends upon his/her past failure. This type of experiences form previous idea regarding motivation.

All these studies pointed out those students' learning styles preferences have considerable effect on their academic achievement/performance to varying extents.

In the causal comparative study of (Angela, 2014) in which it has been determined as the event that a measurably huge contrast existed in the numerical accomplishment of rudimentary understudies in homerooms drove by educators with various predominant instructing styles which is proposed by the (Grasha, 1996) teaching methods and based on numbers of years teaching huge experience. Members in this investigation included 29 "elementary" (grades 3-5) study hall educators in a metropolitan government funded educational system situated in Central Arkansas. Two single direction ANOVAs were utilized to look at the Arkansas "Augmented Benchmark Examination's" (AABE) science subject marks of 855 understudies (Students) in upper rudimentary (Elementary) homerooms of instructors with fluctuated showing styles and long stretches of educating experience. A "two-variable Chi-square examination" was utilized to decide whether "understudies' Academic Expected Performance" (AEP) happened more ever now and again with one showing style than with another. The discoveries of this examination uncovered the "AABE numerical scores of understudies in study halls with instructors utilizing facilitator and delegator showing styles altogether higher than understudies in homerooms of educators utilizing master, formal position,

and individual model instructing styles. Understudies in study halls with educators with five or less long stretches of training experience scored fundamentally lower than instructors or teachers with over five years of instructing experience. The quantity of students who finished AEP in math who were educated in homerooms with facilitator training styles surpassed the quantity of students who were relied upon to make AEP in those study halls.

In the line of investigation conducted by Khalid, Akhter and Hashmi, (2017), they tried to investigate the tenth grade auxiliary schools English educators' ways of showing and ways of erudition of their understudies and look at the possible connection between

training ways of erudition match with understudy's scholastic accomplishment as demonstrated by their last optional educational committee's outcomes. An example of 42 schools was chosen from the number of inhabitants in Punjab region government schools. The participants of this examination were the understudies of every English class and

their class educators. Pertinent data was gathered through instructing and taking (enhancing or erudition) in styles inventories from instructors and their understudies and English subject result was gotten through their applicable schools. The present condition is utilized in Grasha's stock (1996) method in assorted learning styles classes identified with students and explore encouraging styles identified with educators. Grasha's stock was utilized on five sub classes of the scale. Information was dissected utilizing enlightening insights procedures. The outcomes exhibit that understudies' learning styles and their accomplishment in English course, have measurably importance distinction among them and genuinely importance impact was not found, between students learning styles and teaching showing styles on students English accomplishments The researchers Aldajah, Haik and Moustafa(2014) done a line of investigation on the mechanical designing apprentices and their educators at the United Arab Emirates University. Results showed that the understudies learning styles are adjusted: dynamic intelligent, natural sensor, visual-verbal and they lean toward worldwide over the successive learning style. Additionally, the teacher's instructing styles were a blend of master, formal-authority, individual model and delegator. This range of showing addresses the vast majority of the understudies learning techniques, which considers emphatically the learning cycle. This paper gives proposals that educators can carry out to moreover upgrade the instructing interaction

The researcher of study Övez and Uyangör (2016) briefly explained in their study how much arithmetic teacher instructing at optional school sixth, seventh and eighth grade students encourage dependent on understudies' (students) learning styles and to uncover how powerful coordinating with instructors' (students) training styles with students' learning styles in understudies' (students) accomplishments is. As this exploration intends to uncover the case all things considered, study model was utilized in this examination. This investigation was led on 700 auxiliary school apprentices and 31 instructors who were showing those understudies. The examination was led in 2014-2015 training term at 9 schools which were arbitrarily looked over Balıkesir Province Center.

The information of the examination was assembled from 31 optional school math educators and 700 auxiliary school with the assistance of learning and training styles stock scale. The consequences of this examination uncover that educator plan the learning conditions relying upon their own learning styles and that there has been a cozy connection between instructors' learning styles, apprentices' learning styles and apprentices' accomplishments in arithmetic classes, that understudies' accomplishments

increment when instructing is done dependent on their learning styles.

This investigation of Shih and Gamon, (2001) broke down the connections between understudy accomplishment and the accompanying factors: disposition, inspiration, learning styles, and chose socioeconomics. This populace study included 99 students taking two electronic courses offered by the school of farming at a land award college. 74 (75%) apprentices' finished a learning style test, an on-line survey, and got an evaluation before the finish of the semester. The learning style test was the" Group Embedded Figures Test" (GEFT), which characterized understudies (Students) as either field-ward or field-free. The on-line poll comprised of two scales (inspiration and disposition), whose "pilot-test" reliabilities were .71 and .91, individually. More than 66% of the understudies taking the online courses were field-autonomous students; nonetheless, there were no huge contrasts (.05 level) in accomplishment between fieldward and field-free understudies. Additionally, understudies (Studies) with various learning styles and foundations adapted similarly well in electronic courses. The understudies appreciated the accommodation and self-controlled learning pace and were inspired by rivalry and exclusive requirements in online learning. Inspiration was the solitary critical factor that clarified more than one-fourth of understudy accomplishment estimated by class grade.

Drysdale et al., (2001) established a line of investigation. This line of investigation was mainly aimed at exploring whether information regarding ways of erudition of apprentices have influence on learners; scholastics accomplishment. They exhibited that ways of erudition significantly affected on scholastic accomplishment of apprentices in 11 of the 19 courses. Dawood (2014)conducted a study for the exploration of way of erudition of Gulf University students. The sample was 267 SU learners and he determined what type of learner they are; visual, auditory or kinaesthetic.75% females and 25% male were selected. He found that there is no dominant LS. Peacock (2001) has investigated the priority regarding learning style of students of English as Foreign Language and English as Second Language. The outcomes of these researches showed that students are in favor of kinesthetic way of erudition at top priority on any else, whilst usually used instructional techniques that fits aural apprentices.

Different lines of investigation were also conducted to investigate preferred styles of students in Pakistan at different level. One such study was carried out by Irfan et al., (2012) to investigate learning styles preference among medical students. The researchers use Honey and Mumford learning styles inventory to explore preferred learning styles of the students. Conclusion of this line of investigation exposed that there was diversity of learning styles among medical students. Post graduate medical students commonly have the reflector learning styles while undergraduate medical student commonly have activist learning styles predominance. This entitles for assortment of directional and evaluation modalities to go with them. The study of Rahmatullah et al., (2013) used Kolb learning styles model to investigate to preferred learning styles of students. It was revealed that dominant way of erudition of apprentices was Assimilator as compared to other learning styles. The result indicated that students with convergent learning style had higher GPA mean than the other learning styles.

One of the latest studies established by Riazi and Riasati (2007). In their research of giving principles to learning styles of Iranian learner of English as Foreign Language, it was concluded that these learners give priority to an active participation of classroom procedures. They approached to have communication and relation with other learners in the classroom. Kassaian (2007) explored the impact of two kinds of instructional strategies on the learning of new expressions. Sixty-six institution of higher education apprentice possessing an auditory way of erudition, or a visual way of erudition involved in instructional strategy settings which were either related to visionary senses or aural senses. Data that was analyzed showed that: 1) the course of study with visual way of erudition gained language materials they had grasped visually is more effective as compare to the materials that grasped in aural way. But the course of study grasped aurally were not seemed to be course of study that grasped the material they have grasped aurally2) Every course of study all the subjects gained visually presented material in a good way as compared to aurally presented items in the instant and impediment experiments.

Kia, Ali pour, and Ghaderi(2001)conducted a line of investigation. They explored that among the apprentices in Payame Noor institution of higher education in Iran, those with ways of erudition involved visually possess the greatest scholastic accomplishment.

Students' differences draw a line of distinction to various styles of their learning. It carry great weight age for teachers to determine students differences regarding their learning styles. When teacher have the knowledge of students' preferences, it will be valuable and helpful for teachers to be careful in his/her handling of students' differences with which students came to the classroom(Felder &Spurlin, 2005).

On these grounds Rajshree (2011) established a study in Nagpur. Results of this study exposed that mostly the preference of students inclined towards kinesthetic learning style. Further, investigation showed that this learning style is highly correlated with that of students' academic achievement. Learners can be divided in to three styles like visual learner, auditory learner and kinesthetic learner (Alum ran,2008). Study of Morrison (2010) revealed that 30% of the population comprised auditory learners.

Keeping the awareness of self-way of erudition is inevitable for apprentices and trainers. This actually handles the erudition procedure. Way of erudition is imperative on various grounds; nevertheless, three of them are fundamental. Foremost one is that there is variation in individual's way of erudition. As by nature there are diversities in individuals. When a personage takes the accountability of their selves' erudition it may cause the effectiveness of learning process. So then, to cope this problem, it is imperative for personage to be aware of his preferences regarding the ways of erudition. For the effective learning learner keeps the knowledge of the features of that way of erudition. The exposure of erudition procedure can be foster well when everyone builds up a familiarity of their selves formulation of way of erudition. This cause a source of satisfaction for them with the environment in which he/she is interacting. He/she takes all opportunities of learning as a chance. By adopting such manner, it becomes possible for personage to possess and attain the continuously varying knowledge (Coffield, 2004).

It is depicted from various lines of investigations there are so many LS that a person possess. These researchers show that among all those LS that an individual possess, one of the LS is dominant. Others existing LS are comparatively at a reduced amount of prevailing. In the present of so many LS that a person possesses, the degree at which they are used, could be changed (Tamel, A, 2002).

Felder et al., (2005) also discussed the benefits of the knowledge of identification of LS for the learners. The learner, possessing this knowledge of LS, recognizes their goals and objectives in a very easy way. In order to attain academic goals, they select appropriate ways of learning that fits for them. In contrast, the individual who cannot recognize their LS, fails to attain remarkable accomplishment in life. They cannot understand that what should be learn and what ways should be adopted to learn it. Such type of learner are not confident. Frustration prevails on them. Knowledge of identification of LS is necessary either for teacher or for learners.

Can (2009) says that there is considerable relations amongst apprentice's way of erudition, gender and the kind of edification for which they are given exposure.

Vincent and Ross (2001) explained, most educators are agreed upon the existence of ways of erudition and their influences on erudition process. Kaurse (2000) said that not a single method is best for all students but variedly of it, depends upon individual learner. He found that it is possible for many apprentices' to grasp minute knowledge wrongly very quickly especially when they capitalize can their way of erudition's strength. Philips, et al., (2001) found that different activities was found to be involved in men and women when engaged in different activities e.g., reading, listening, experiencing emotion etc. The present research of Knaujia and Bhattacharya(2016) manages the impact of accomplishment inspiration on learning styles. The reason for this investigation was to see if there was a specific learning style of high accomplishment rationale understudies (students) and low accomplishment thought process understudies (Students) or not. The examination was led on 348 optional school understudies (Students) of Luck now city. To accomplish the reason for the investigation, the ILS of Richard M. Felder & Solo man (1994) was utilized. The instrument involves 44 bipolar things for 8 learning styles: Active v/s Reflective (ACT/REF), Sensitive v/s Intuitive (SEN/INT), Visual v/s Verbal (VIS/VRB) and Sequential v/s Global (SEQ/GLO).

All 8 bipolar learning styles estimates the learning style of the students. The updated BAMI (Kannaujia & Bhattacharya, 2016) controlled on same 348 studies to gauge the impact of accomplishment inspiration on Learning Styles. BAMI structure 'A' actions 11 components of Achievement Motivation with 44 things. This examination considered just high accomplishment thought process and low accomplishment rationale students. The investigation found that there is no huge contrast in Learning Styles of high accomplishment rationale and low thought process students. They favored same learning styles to learn with the exception of touchy v/s natural learning style where obvious style didn't arise. Dowson and McInerney(2001); Pintrich (2000) concluded the accomplishment impetus is a thrust to proceed in erudition task and pursuit leaning to objective deportment in formulation of combined interface, competence regarding content and presenting tremendous work that is handing over to them. It is very accommodating in achievement leaning attitude and also improved by keeping other happy. It may possibly develop apprentices' ideas and by admiration, assisting and

keeping people happy improved their objective leaning attitude at school stage. This findings quite similar with the results of Dowson, Barker &McInerney (2003) research work. Mastery goals are related with expertise and an increase of information and comprehending by putting efforts in learning(Murphy & Alexander, 2000). Those learners who opt for goal have achievement customary that are developed by themselves. They perceive success in shape of mastery and learning. Learning and motivation is effected by mastery goal in a positive way. These goals are interrelated with highly cognitive tasks, self-efficacy at higher degree, see to get target and problem solving(E. M. Anderman, Maehr, & Midgley, 1999). Performance goals referred as a wish to obtain positive judgments and leave unfavorable judgments of an individual's expertise and their worries (Murphy & Alexander, 2000). The study of Nasreen et al. (2012) exhibits that teaching styles and learning styles are positively correlated. Studies show that matching teaching styles with students' learning style can improve students' learning achievement (Safarikova, 2016; Arifin, 2015; Budiarta et.al, 2014; Kovacic, 2014; Peacock, 2001).

# 2.32 KEY ISSUES RELATED TO TEACHING, LEARNING AND ACHIEVEMENT MOTIVATION

The present world is dealing with numerous issues brought about by the financial emergency, prompting an instructive one as well. We are seeing significant changes in the educational plans, in the various methods of appraisal, in the trans-disciplinary way of instructing and learning, which shocked the understudies, leaving them incapacitated and unfit to adapt to these progressions that are occurring at an exceptionally high speed.

Considering that, on the off chance that we need to give schooling of greatness, we need to know the understudies' proficient inspiration and what carries them to scholastic exhibitions and to effectively adapt to the difficulties of the skill society .In advanced education foundations, achievement includes the accomplishment of pre-set up objectives, and variation to the progressions forced by the expertise society.

#### SUMMARY

The available literature threw light on the component of educational process around which the whole teaching/learning process revolves. A teacher is a counting part of the teaching and erudition setting. The demands from teachers are many. He may be a good initiator, a moralist, a guide and the most important an architect of the society, a nation builder. A best teacher is the one who brings out the best in his students and make a student like he was never before. Khan(2011) investigated that the instructor possess the major counting place in the whole scenario of edification on goings. Individual differences are present everywhere and also in the classroom. Teachers have to keep in mind the requirements of all kinds of students while teaching. Teachers have many styles to cope their students' problems in learning. Apprentices' attainment will boost when excellence of tutoring is applied for the purpose of teaching instructional sets. There are teachers having different teaching styles. Some teachers possessed formal authority teaching style. These teachers have a variety of knowledge. They play as role model for their apprentices. Another style of teachers is expert style. These teachers possess expertise of their field of knowledge. These teachers provide their students which they require and that is of their interests. Another style of teachers is facilitator. In this style relationship of teacher students is at personnel level. Teacher possessing delegator style act as a becomes a resource person who provide students guidance in their freely doing work. Lastly, there is a teaching style in which students gain knowledge and train by their teachers own example. Students of different kinds want to have an instructor having abilities of understanding their students potential. There are students who learn information through seeing, some learn through listening and others learn through experiences. A situation of being motivated to achieve something in a real setting is regarded as achievement motivation. On the ground of achievement motivation, there are three types of goals. Firstly there are mastery goals. These goals are also regarded as learning goals. Major attention of these goals is basically on attainment of expertise or forming mastery in handling novel clumps of knowledge, ideas or belief or capabilities. Besides this, there are ego related goals. These goals are performance goals. These goals are also regarded as ego related goals. These goals emphasized on achieving essence value that are builds on norms, putting efforts for the best. Instead of putting efforts that fit the end, social goals exist. These are in form of relation of individuals (Adam, 2011).

Numerous research studies have been conducted on teaching styles, learning styles and students' achievement motivation. In most of studies, researchers took these variables independently or established relationship of these variables with some others influencing variables. It was concluded by studying literature review that on the interrelationship of teaching styles, learning styles and achievement motivation even not a single research is available which can tell us the nature of interrelationship of ways of instructing in the perception of apprentices, ways of erudition and achievement motivation of understudies especially in the context of secondary school level. Therefore, this study was design to investigate and unrevealed these relations in the context of secondary school level. Moreover, teachers want their students to be successful in their life, and immediate need, to be successful in their learning. They prepare their students to tackle problems. Teachers try to keep their students far off from failure. Teachers give incentive to their students so that they may encourage to do good things like that in order to be prominent in teacher's eye. With the proper teaching style that fits for students' successful learning, students' achievement motivation can be improved. This will be added for their future academic success in higher grade classes.

## **CHAPTER 3**

# **RESEARCH METHODOLOGY**

This research study was carried out to find out the interrelationships of teaching styles as perceived by students, learning styles of students and students' academic achievement motivation of secondary school in Tehsil Rawalpindi. The present chapter provides detail under various headings like research approach, population, sample, instrument, administration of instruments, procedure for data collection and statistical techniques used for analyzing data.

#### 3.1 Research Approach

For this research study, quantitative approach was used to handle collected data numerically by using statistical analysis. Quantitative research basically contains numerical data for the interpretation of the results. It handles a systematic investigation of phenomenon by gathering quantifiable data and using statistical, mathematical or computational techniques. On the other hand, there is qualitative research. This is a scientific method of observation to gather non-numerical data. While the present study was designed on survey method, therefore quantitative approach suited it. This research study was comprised of two parts. In first part of the study psychometric properties of research questionnaires were determined on a sample of fifty secondary school students. Second part of the study comprised of main study, in which simple random sample of 521 secondary school level students were selected from various secondary schools of Tehsil Rawalpindi. Data was collected through personal visit and with the help of some others to sample schools. Data was analyzed according to the objective of the study with the help of SPSS-IBM 22 by applying various statistical tools such as percentages, mean and Pearson correlation. Findings were made numerically in the light of analyzed data.

#### **3.1.1 Research Method**

The research was descriptive in nature as the present study was based on four major objectives. These are; to explore various teaching styles as perceived by students at secondary school level; to determine the learning styles of students at secondary school level; to investigate the level of students' achievement motivation at secondary school level; to examine the interrelationship of teaching styles as perceived by students, learning styles and students' achievement motivation at secondary school level, and to examine the relationship of teaching styles as perceived by the students and learning styles of students at secondary school level These objectives had strong connection with the currently prevailing situation in educational setting. The main focus of descriptive research was to discuss and handle the current issues and problems. Interpretation of TS, LS and SAM is burning issue nowadays and it seeks attention. So the researcher was attracted to this category of descriptive research.

#### **3.1.2 Research Design**

The study was co relational which aimed to determine whether, and to what extent a relationship exists between one or more variables. The researcher investigated the interrelationship of these variables TS,LS and SAM. Moreover, relationship of TS and

LS, TS and SAM, and LSand SAM were explored. That's why co relational method was used for this research study.

# 3.2 Population

There were total 365 public Sector schools of secondary level located in Tehsil Rawalpindi.

Table 3.1

**Research Population** 

Region/Tehsil	Type of school	Total schools	Total N	
Rawalpindi	Secondary school	365	5212	

Total 5212 students studying in the academic session 2017-2019 constituted as the population of the study (Source: DEO Office Record, 2018).

## 3.3 Sample and Sampling Technique

In order to take sample from the population, one of the most simple and usually in practice method for selection of sampling is Simple Random Sampling(SRS) technique. In this sampling strategy, sample is chosen in unit wise- manner. This strategy gives equal probability of selecting regarding each unit. Equal chances are given by drawing sample having n units by a population denoted as  $\Omega$  having size N through setting equality of probability of choosing all units. This is one of the way of sampling which

contained all expected combinations of a unit that is segregated by the population of N unit by giving similar choice of selection (Singh, 2005).

In this study, secondary school level students were considered as units of analysis. For this purpose from the sample, total 50 secondary level schools were randomly selected. It is done due to considering this procedure which is choice of a group of individual adopting the way that all individual that a definite population contained an equal and autonomous chance of being nominated (Gay, 2003). In first step of selecting sample population 50 public sector schools of Tehsil Rawalpindi were targeted. List of selected schools is attached (See Appendix S). Only those schools were approached where humanities group was present. Sample population was 521 students. This is 10% of the population that is according to Krejcie and Morgan' s work (1979) that help in extracting sample from the population.

Table 3.2

**Research Sample** 

Region/Tehsil	Type of School	Total sch.	Ν	n Students
Rawalpindi	SecondarySchools	365	5212	521

Next step of sampling was to segregate the targeted sample. A mechanism was adopted for this purpose. Code No. 0001 was allotted to 1<sup>st</sup> student of 1<sup>st</sup> school that was selected as the sample of the study. Similarly, 0002 code was assigned to the next student and so on. This was to continue for all the schools. Then students were selected randomly. In

order to make selected students prominent, a red circle was marked around his/her code as 0001, 00013,00028 and so on. Preceding in this manner it segregated 521 students as sample of the study.

### **3.4 Research Instruments**

Three questionnaires were developed in the present line of investigation. These questionnaires were used to assess teaching styles, learning styles and students' achievement motivation. These were developed by the researcher with the help of supervisor and adapted in the context of Pakistan. Then these were validated through pilot-testing.

## 3.4.1 Description of Teaching Styles Questionnaire

Teaching style research tool was developed by the researcher with the help of supervisor. It was based on theory of Grasha's Teaching Styles (1996). It consisted of 20 items (Table 3.3) various facets of teaching styles through various items explained as:

Sr.No	Subscales	Item No.	Total Item
1.	Formal Authority	1,2,3,4	4
2.	Expert Style	5,6,7,8	4
3.	Facilitator	9,10,11,12	4
4.	Delegator	13,14,15,16	4
5.	Personal Model	17,18,19,20	4

Items of Teaching Styles Questionnaire

# 3.4.2 Description of VAK Learning Style Questionnaire

This questionnaire was based on the work Fleming (2001) that was about VAK instrument known as VAK Learning Style Questionnaire. It was applied in order to examine the way of erudition learning of students. It contained 18 valid items, each of 6 comprising of 3 learning styles of students. Further breakup of items in each category is shown as under:

Table 3.4

#### Items of Learning Styles Questionnaire

Sr.No	Subscales	Item No.	Total Items
1.	Visual Learner	1,2,3,4,5,6	6
2.	Auditory Learner	7,8,9,10,11,12	6
3.	Kinesthetic Learner	13,14,15,16,17,18	6

# 3.4.3 Students' Achievement Motivation Scale

Third research inventory was used to measure achievement motivation. It was based on the theory of McInerney regarding achievement motivation in 1997. Detail is as under.

Table 3.5

Items of Students' Achievement Motivation Questionnaire

Sr.No	Subscales	Item No.	Total Items
1.	Social Goals	1,2,3,4,5	5
2.	Mastery Goals	6,7,8,9,10	5
3.	Performance Goals	11,12,13,14,15	5

# 3.4.5 Demographic Variables Information Sheets (DVIS)

This only consisted of respondents' school name. The instruments of the study were developed on the pattern of 5-point Likert scale. Instructions were given to apprentices to show indication for each item in the following way, 1= "Never True (NT)"

2= "Rarely True (RT)"

3= "Often True (OT)"

4= "Sometimes True (ST)"

5= "Always True (AT)"

These instruments were on five points scale giving a point value from integers 1-5 to the response never true denoted by NT and always true by AT. The researcher had an observation regarding this, in case apprentices of secondary school showed indication as "always true" they showed most preferred teaching style and most preferred learning style and similarly, when secondary school students showed indication as "never true", in this case they expressed less preferred leaning style and less preferred teaching style. In the same way, when secondary school apprentices showed indication as "always true" in this case, they expressed an upper level of attainment regarding behavior that seeks achievement. Similarly, in case, apprentices showed indication as "never true" in this case they expressed behavior which seek goal.

For the purpose of taking permission, request was made from authors of questionnaire related to learning styles and students' achievement motivation (See Appendices P& Q). Three research tools contained a very standardized validity and reliability along various cross-cultural samples (McInerney, Marsh & Yeung, 2003). The adaption and usability of all the three research tools, questionnaires were justified

through reliability analysis by using SPSS. All of the three questionnaires were collectively used as an instrument to investigate teachers' teaching styles as perceived by the students, learning styles and students' achievement motivation and their interrelationship of secondary level school students in the context of Pakistan.

### 3.5 Pilot Testing

Before its use for data collection, questionnaires were tried out on a small sample. Ten secondary schools were selected as pilot testing from Tehsil Rawalpindi. Fifty students were selected from these schools. The pilot testing involved the administration of survey questionnaire, which directed the process of development of the final instruments. The measurement of reliability and validity of the research instrument inventories were measured in the light of Pakistani background.

The respondents of pilot testing were similar and comparable with the population. Students reported that they had little difficulty with the vocabulary of the instrument. It was also observed that students did not feel free with the language of the questionnaires to respond quickly. So, the questionnaires were translated into Urdu language (Appendix F, Appendix G & Appendix H). Back- translation method was used to translate the questionnaires in Urdu. After taking the guidance and approval of experts of Urdu Department of NUML, Islamabad, the questionnaires were used to get responses (See Appendices M,N O).For examining the reliability, an analysis of internal consistency of items was made. For this purpose, Cronbach alpha was used for total scale as well as for each sub-scale.

## **3.5.1 Tool Construction**

In initial version, there were 26 items in LS Questionnaire. LS Questionnaire comprised of 29 items. After pilot run of the research study, it was unveiled that there are 6 out of 26 items of TS Questionnaire and 11 out of 29 items of LS Questionnaire had very low or negative reliability. Reliability of those 6 LS items was 0.51, -.07, 0.43, 0.033, 0.32 and 0.21. Reliability of those 11 items was -0.021, 0.068, 0.143, 0.43, 0.51, - 0.64, -0.075, 0.33, 0.150, 0.055 and 0.08. These items had not good and strong reliability. Even0.5 reliability was not considered good. This problem raised because respondents found difficulty in understanding the language of items. Few of items did not fit according to secondary students' level. Efforts were made to enhance and modify 2 items of LS Questionnaire while others were excluded.

## 3.5.2 Reliability of Questionnaires

#### Table3.6

Reliability of Teaching Style Scale and sub-scales

Sr. No	Teaching Styles Scale and Sub-Scale	Alpha Coefficient
Teaching	g Styles	0.79
01.	Formal Authority	0.68
02.	Expert Styles	0.64
03.	Facilitator	0.67
04.	Delegator	0.71
05.	Personal Model	0.77

Alpha coefficient values of Teaching Styles Scale and its subscales showed that this scale was reliable for measuring teaching styles.

Table3.7

Reliability of VAK Learning Style Scale and Sub-Scales

Sr. No	Learning Styles Scale and Sub-Scale	Alpha Coefficient
Learnin	g Styles	0.67
01.	Visual	0.71
02.	Auditory	0.69
03.	Kinesthetic	0.66

Alpha coefficient values of VAK Learning Styles Scale and its subscales showed that scale was reliable for measuring learning styles.

Table 3.8

Reliability of Achievement Motivation Scale and Sub-Scales

Sr. No	Achievement Motivation Scale and Sub-	Alpha Coefficient
	Scale	
Achiever	ment Motivation	0.88
01.	Social Goal	0.92
02.	Mastery Goal	0.81
03.	Performance Goal	0.80

Alpha coefficient values of students' achievement motivation scale showed that scale was highly reliable for measuring students' achievement motivation.

#### **3.5.3 Validity of Instruments**

Validity is defined as the accuracy and meaningfulness of inferences, which are based on the research result (Mugenda & Mugenda, 2003). In other words, it is about to which extent a study tool measures what it aimed to measure. A research instrument is valid if its content is relevant and appropriate to research objectives. Content validity refers to the degree to which an assessment instrument is relevant to and representative of the targeted construct it is designed to measure. Content validity consists of two phases. The first is the qualitative review by the experts while the second is the statistical test using content validity index (Teherdoost,2013).

To ascertain the content validity of the present research instrument, the researcher consulted the experts of the field of education. The consultation aimed at examining the contents and structure of the instruments judging their adequacy for use in the present study. The resultant suggestion and recommendations were used to make appropriate amendments in instruments. For each scale CVI was applied. CVR for each item was calculated. Values of CVR for each item was .99 at p=0.5 significance level. Tools were improved in the light of experts' valuable review (names are given in Appendix I). Certification of validation were also taken(See Appendix J, Appendix K and L).

## 3.6 Data Collection

Initially the list of secondary level schools located in Tehsil Rawalpindi was collected from the District Education Office Rawalpindi. From these lists 50 secondary level schools were selected randomly. In order to minimize attrition rate and save time and resources, a multi-channel system of approach to the respondents was adopted. The researcher covered 70% of schools by personal visit. The rest 30% of schools were approached through the researcher's friends, siblings and colleagues. A letter of permission to gather data from school was attached with packet containing questionnaires was attached which explain the purpose of study. The researcher selected every 14<sup>th</sup>students randomly from the roll call register of 10<sup>th</sup> class students and sometimes researcher used data file where students were assigned codes. Only students of Arts Group studying General Science were approached. The researcher herself or her representatives explained the things orally. The researcher received 70% responses but return rate of the rest of 30% respondents was 29.5%. So, researcher received a total 500 responses for teaching styles as perceived by the students, ways of erudition and attainment motivation of apprentices at secondary level schools.

#### **3.7 Data Analysis**

Analysis was made by applying percentages, mean scores and mediation analysis (Regression )using statistical procedure through SPSS-IBM version 22 because multicollinearity arises when the independent variables in a regression model do not meet the requirement that they be independent of each other, posing a serious threat to the validity of the regression (Farrar & Glauber, 1967). This occurs when two independent variables (Teaching Styles and Learning Styles) are highly correlated with each other and both are highly correlated with the dependent variable (Achievement Motivation). In such cases, the question for the researcher is which of several models accurately reflects the true relationship between these three variables.

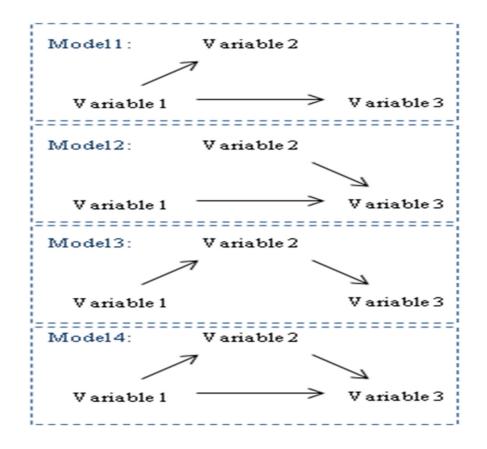


Figure 3.1 Inter-relationship Models

This study seeks to determine which of these four models represents the true relationship between teaching styles, learning styles, and achievement motivation in order to determine if learning styles is a dependent variable (Model 1), a second measure of teaching styles (Model 2), or a perfect (Model 3) or imperfect (Model 4) mediator of the effects of teaching styles on achievement motivation.

# **CHAPTER 4**

# **RESULTS AND DATA INTERPRETATION**

This chapter deals with the analysis and interpretation of the data in tabular form. It has been divided into five main sections for the data analysis based on objectives and hypotheses.

# 4.1 Summary Analysis

Table 4.1

Summary of Analysis

Sections	Descriptions		
Section I	Deals with the tables related to tool of the research. It includes tables		
	of reliability (See Chapter 3).		
A.	Descriptive Analysis		
Section II	For the purpose of determining the contributory factor of respondents,		
	percentages were applied regarding the TS questionnaire (See Table		
	4.2-4.6).		
Section III	Percentages of each statement of the questionnaire regarding LS of		
	the research study (See Table 4.7 -4.9).		
Section IV	For the purpose of determining the contributory factor of respondents,		
	percentages were applied regarding the achievement motivation		
	questionnaires of the research study. (See Table 4.10 -4.12).		
Section V	Mean scores were used for teaching styles and for its subscales.		
Section VI	Mean scores of learning styles and for three of its sub factors.		
Section VII	Mean scores of learning styles and for three of its sub factors.		

Section VIII	Mean scores were used for SAM and for its subscales.					
В.	Inferential Statistic					
Section IX	This section is based on the analysis of data against Objective No. 4 that is "to examine the interrelationship of teaching styles learning					
	styles and students' achievement motivation at secondary school					
	level. For this purpose, null hypothesis $H_01$ " there is no significant					
	interrelationship of teaching styles as perceived by students, learning styles and students' achievement motivation at secondary school					
	level" was established. Mediation analysis by regression due to the					
	presence of multi-collinearity was used to find out the					
	interrelationship of three variables TS, LS and SAM at secondary school level.					

# **A. Descriptive Statistics**

## Section II: Analysis of Teaching

#### Table 4.2

Response and Percentage of Teaching styles like Formal Authority (N=500)

Statement	Ν	AT	ST	OT	RT	NT
My teacher thinks that facts,	500	351	54	45	45	5
concepts and principles are the	100%	70.2%	10.8%	9%	9%	1%
most important thing that we						
should acquire.						
I describe my teacher as	500	303	79	94	21	3
"Storehouse" of knowledge who	100%	60.6%	15.8%	18.8%	4.2%	0.6%
dispenses the facts principles and						
concepts we need.						
My teacher sets high standards	500	298	109	51	30	12
for us in the class.	100%	59.6%	21.8%	10.2%	6%	2.4%
My teacher's expectations for	500	212	73	73	93	49
what he wants us to do in the	100%	42.4%	14.6%	14.6%	18.6%	9.8%
class are clearly defined in the						
syllabus.						

It was found that 70.2% respondents went for the option "always true" for the statement "My teacher thinks that facts, concepts and principles are the most important things that we should acquire" while 0.6% respondent gave the opinion never true for the statement" I describe my teacher as "Storehouse" of knowledge who dispenses the fact principles and concepts we need".

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Statement	Ν	AT	ST	ОТ	RT	NT
My teacher guides us work on course	500	162	125	86	80	47
project by asking questions	100%	32.4%	25%	17.2%	16%	9.4%
expressing options & suggesting						
alternative ways to do things.						
I take responsibilities for teaching	500	217	121	63	64	35
	100%	43.4%	24.2%	12.6%	12.8%	7%
part of the class session.						
My teacher's expertise is typically	500	259	118	70	29	24
used to resolve disagreement about	100%	51.8%	23.6%	14%	5.8%	4.8%
content issue.						
Eventually I begin to think like my	500	171	186	72	54	17
	100%	34.2%	37.2%	14.4%	10.8%	3.4%
teacher about course content						

Response and Percentage of Teaching Styles like Expert Styles (N=500)

It was found that 51.8% respondents went for the option "always true" for the statement "My teacher's expertise is typically used to resolve disagreement about content issue" while 3.4% respondents gave the option never true for the statement "Eventually I begin to think alike my teacher about course content".

Statement	Ν	AT	ST	OT	RT	NT
My teacher spend time consulting with	500	256	110	51	43	40
us on low to improve our work on	100%	51.2%	22%	10.2%	8.6%	8%
individual and / or group project.						
To develop the ability of thinking and	500	310	32	97	39	21
working independently is an important	100%	62%	6.45%	19.4%	7.8%	4.2%
goal of my teacher.						
My teacher provides me clear guideline	500	271	101	69	46	13
in this course.	100%	54.2%	20.2%	13.8%	9.2%	2.6%
My teacher gives us a lot of personal	500	241	87	123	33	16
support and encourage to do well in this						
course.	100%	48.2%	17.4%	24.6%	6.6%	3.2%

Response and Percentage of Teaching Styles like Facilitator (N=500)

It was found that 62% respondents opted "always true" for the statement" To develop the ability of thinking and working independently is an important goal of my teacher" while 2.6% respondents gave the option "never true" for the statement" My teacher provides me clear guideline in this course".

#### Table 4.5

Statement	Ν	AT	ST	OT	RT	NT
My teacher allows me to design one	500	204	128	54	72	42
	100%	40.8%	25.6%	10.8%	14.4%	8.4%
of more self-directed learning.						
My teacher encourages small group	500	128	174	104	75	19
discussions to help us develop our	100%	25.6%	34.8%	20.8%	15%	3.8%
ability to think critically.						
My teacher gives us choices among	500	178	119	103	81	19
activities in order to complete course	100%	35.6%	23.8%	20.6%	16.2%	3.8%
requirement.						
My teacher assumes the role of a	500	299	64	68	45	24
resource person who is available to	100%	59.8%	12.8%	13.6%	9%	4.8%
students whenever we need help.						

Response and Percentage of Teaching Styles like Delegator(N=500)

It was found that 59.8% respondents go opted "always true" for the statement" My teacher assumes the role of a resource person who is available to students whenever we need help" while an equal %age of 3.8% respondents gave the option "never true" for both the statements" My teacher encourages small group discussions to help us develop our ability to think critically" and for the statement "My teacher gives us choices among activities in order to complete course requirement".

Statement	Ν	AT	ST	OT	RT	NT
Our teacher's standards and	500	74	113	70	99	144
expectations are strict and rigid.	100%	14.8%	22.6%	14%	19.8%	28.8%
My teacher typically shows us	500	225	87	104	55	29
how and what to do in order to	100%	45%	17.4%	20.8%	11%	5.8%
master course content.						
My teacher often uses examples	500	199	134	53	78	36
from his personal experiences to	100%	39.8%	26.8%	10.6%	15.6%	7.2%
illustrate points about the material.						
My teacher standards and	500	300	70	87	35	8
expectations help us to develop	100%	60%	14%	17.4%	7%	1.6%
the discipline that need to learn.						

Response and Percentage of Teaching Styles like Personal Model (N=500)

It was found that 60% respondents went for the option "always true" for the statement" My teacher standards and expectations help us to develop the discipline that need to learn" while a very low %age of1.6% respondents gave the option "never true" for the same statement.

# Section III: Analysis of Learning Styles

# Table 4.7

Response and Percentage of Learning Styles like Visual Learning Style (N=500)

Statement	Ν	AT	ST	OT	RT	NT
When I concentrate something, I	500	319	69	83	26	3
focus on the words or the pictures in front of me.	100%	63.8%	13.8%	16.6%	5.2%	0.6%
My first memory is of looking at	500	193	101	103	83	20
something.	100%	38.6%	20.2%	20.6%	16.6%	4%
When I here to revise for an	500	181	138	83	65	33
exams, I write lots of revision notes and diagrams.	100%	36.2%	27.6%	16.6%	13%	6.6%
	500	38	177	39	106	140
Most of my free time is spent on watching television	100%	7.6%	35.4%	7.8%	21.2%	28%
	500	232	54	110	92	12
I find it easiest to remember faces.	100%	46.4%	10.8%	22%	18.4%	2.4%
I write notes of all lectures in the	500	120	162	38	87	92
class.	100%	24%	32.4%	7.6%	17.4%	18.4%

It was found that 63.8% respondents went for the option "always true" for the statement" When I concentrate something, I focus on the words or the pictures in front of me" while a very low %age of 0.6% respondents gave the option "never true" for the same statement.

Statement	N	AT	ST	OT	RT	NT
I usually need verbal	500	114	165	98	91	32
direction.	100%	22.8%	33%	19.6%	18.2%	6.4%
I use verbal explanation while	500	191	138	84	63	24
teaching something.	100%	38.2%	27.6%	16.8%	12.6%	4.8%
My first memory is of	500	161	89	94	105	51
spoken words.	100%	32.2%	17.8%	18.8%	21%	10.2%
I first notice how people	500	282	69	69	45	35
speak.	100%	56.4%	13.8%	13.8%	9%	7%
I easily remember people by	500	313	64	69	44	10
their names.	100%	62.6%	12.8%	13.8%	8.8%	2%
I easily remember jokes that I	500	219	111	68	82	20
heard.	100%	43.8%	22.2%	13.6%	16.4%	4%

Response and Percentage of learning styles like Auditory Learning Style (N=500)

It was found that 62.6% respondent went for the option "always true" for the statement" I easily remember people by their names" while 2% respondents gave the option "never true" for the same statement.

Statement	Ν	AT	ST	OT	RT	NT
During my free time, I enjoy	500	146	178	91	65	20
playing sport or doing	100%	29.2%	35.6%	18.2%	13%	4%
something by myself.						
When I concentrate, I move	500	28	145	61	44	222
around a lot, fiddle with pens	100%	5.6%	29%	12.2%	8.8%	44.4%
and pencils and touch things.						
My first memory is of doing	500	173	58	142	74	53
something.	100%	34.6%	11.6%	28.4%	14.8%	10.6%
	500	217	89	68	63	63
I think better when I move around.	100%	43.4%	17.8%	13.6%	12.6%	12.6%
When I am anxious, I cannot	500	140	151	73	60	76
sit still, I move around constantly	100%	28%	30.2%	14.6%	12%	15.2%
I would start to do things	500	81	72	42	49	256
rather pay attention to direction	100%	16.2%	14.4%	8.4%	9.8%	51.29

Response and Percentage of Learning Styles like Kinaesthetic Learning Style (N=500)

It was found that 43.4% respondents went for the option "always true" for the statement" I think better when I move around" while 4% respondents gave the option

"never true" for the statement" During my free time, I enjoy playing sport or doing something by myself".

# Section IV: Analysis of Students' Achievement Motivation

# Table 4.10

Response and Percentage of Students' Achievement Motivation like Social Goals (N=500)

Statement	N	AT	ST	OT	RT	NT
I am most motivated when I work	500	278	80	49	72	21
with others.	100%	55.6%	16%	9.8%	14.4%	4.2%
I am most motivated when I am	500	174	104	114	77	31
in a group.	100%	34.8%	20.8%	22.8%	15.4%	6.2%
I am most motivated when I am	500	316	U	103	8	4
helping others.	100%	63.2%	13.8%	20.6%	1.6%	0.8%
I am most motivated when I am	500	225	115	94	55	11
showing concern for others.	100%	45%	23%	18.8%	11%	2.2%
I am most motivated when I am notice by others.	500	111	136	85	86	82
	100%	22.2%	27.2%	17%	17.2%	16.4%

It was found that 63.2% respondents went for the option "always true" for the statement" I am most motivated when I am helping others" while 0.8% respondents gave

the option "never true" for the statement" I am most motivated when I am helping others".

Table 4.11

Response and Percentage of Students' Achievement Motivation like Mastery Goals

Statement	Ν	AT	ST	OT	RT	NT
I am most motivated when I see	500	281	93	115	11	0
my work improve.	100%	56.2%	18.6%	23%	2.2%	0%
I am most motivated when I am	500	278	79	96	40	7
good at something.	100%	55.6%	15.8%	19.2%	8%	1.4%
I am most motivated when I am	500	280	67	102	43	8
becoming better at my work.	100%	56%	13.4%	20.4%	8.6%	1.6%
I am most motivated when I am	500	344	30	85	30	11
confident that I can do my school work.	100%	68.8%	6%	17%	6%	2.2%

(N=500)

It was found that 68.8% respondents went for the option "always true" for the statement" I am most motivated when I am confident that I can do my school work" while no one respondents gave the option "never true" for the statement" I am most motivated when I see my work improve".

# Table 4.12

Statement	Ν	AT	ST	OT	RT	NT
I am most motivated when I	500	254	122	94	24	6
get a reward.	100%	50.8%	24.4%	18.8%	4.8%	1.2%
I am most motivated when I	500	339	47	106	5	3
get good marks.	100%	67.8%	9.4%	21.2%	1%	0.6%
I am most motivated when I	500	236	104	82	70	8
am in-charge of a group.	100%	47.2%	20.8%	16.4%	14%	1.6%
I am most motivated when I	500	208	96	122	38	36
am praised.	100%	41.6%	19.2%	24.4%	7.6%	7.2%
I am most motivated when I	500	293	79	84	31	13
am doing better than others.	100%	58.6%	15.8%	16.8%	6.2%	2.6%

Response and percentage of students' achievement motivation like Performance Goals (N=500)

It was found that 67.8% respondents went for the option "always true" for the statement" I am most motivated when I get good marks" while 0.6% respondents gave the option "never true" for the same statement.

# Section V: Mean Scores of Teaching Styles

**Objective No.1:** "To explore teaching styles as perceived by the students at secondary

school level."

Table 4.13

Mean Scores of teaching styles as perceived by students at secondary school level (N=500).

<i>S. No.</i>	Variables	Mean	Remarks
1.	Formal authority teaching style	4.17	Sometimes true
2.	Expert teaching style	3.89	Sometimes true
3.	Facilitator teaching style	4.11	Sometimes true
4.	Delegator teaching style	3.81	Sometimes true
5.	Personal model teaching style	3.67	Sometimes true

Results show that formal authority teaching styles was most preferred teaching style of teachers as perceived by the students. Furthermore, personal model teaching style of teachers as perceived by the students was least preferred.

# Section VI: Mean Scores of Learning Styles

**Objective No. 2:** "To determine the learning styles of students at secondary school

level."

Table 4.14

Mean Scores of learning styles at secondary school (N=500)

Variables	Mean	Remarks
Visual learning style	3.80	Sometimes true
Auditory learning style	3.80	Sometimes true
Kinaesthetic learning style	3.15	Often true
	Visual learning style Auditory learning style	Visual learning style3.80Auditory learning style3.80

Results show that the students most preferred learning style is visual learning style and auditory learning style and kinaesthetic learning style is least preferred learning style.

#### Section VII: Mean Scores of Level of Students' Achievement Motivation

Objective No.3:"To investigate the level of students' achievement motivation at

secondary school level."

Table 4.15

Level of students' achievement motivations at secondary school(N=500)

S.No.	Variables	Mean	Remarks
1.	Social goals	3.85	Sometimes true
2.	Mastery goals	4.25	Sometimes true
3.	Performance goals	4.13	Sometimes true
	Overall achievement motivation	4.07	Sometimes true

Results show that most of the students showed highest mean score to mastery goals whereas, students showed lowest mean scores to social goals.

#### Section VIII: Inferential Statistics-Testing of Null Hypothesis

**Objective No. 4:** "To examine the interrelationship of teaching styles as perceived by the students, learning styles and achievement motivation of students at secondary school level."

Ho1: There is no significant interrelationship of teaching styles, learning styles and Achievement motivation of students at secondary school level.

# Interrelationship among Teaching Styles, Learning Styles and Achievement Motivation of Students (N= 500)

Regression	Independent variable	Dependent variable	Explained variance	Standardized Beta	Sig.
#1	Teaching Styles	Learning Styles	38%	.617	.008
#2	Teaching Styles	Achievement Motivation	18%	.425	.040
#3	Teaching Styles	Achievement Motivation	60%	080	.715
	Learning Styles			.819	.002

The results of the mediation analysis are summarized in Table 4.16. For each of the three regressions in the mediation analysis, it was reported that the percentage of the variance in the dependent variable was explained by the independent variable or variables (Explained Variance), the amount of change in the dependent variable for every one unit change in the independent variable (Standardized Beta), and the *p*-value of the standardized beta coefficient (Significance).In the first regression, teaching Styles was a significant predictor of learning styles (p = .008), explaining 38% of the variance and having a standardized beta coefficient of .617. This indicates that a student's learning depends on how much teaching styles were effective and results showed that teaching styles is significant for the students' learning.

In the second regression, teaching styles was a significant predictor of achievement motivation of students (p = .040), explaining 18% of the variance and had a

standardized beta coefficient of .425. This indicates that a student's achievement motivation depends on how much teaching styles were effective. In the third regression, learning styles was a significant predictor of achievement motivation (p= .002). This indicates that a student's achievement motivation depends on their learning styles. Additionally, when achievement motivation was accounted for in the third regression, teaching styles was no longer a significant predictor of achievement motivation (p = .715) and the standardized beta coefficient for teaching styles fell to effectively zero (-.080) while the standardized beta coefficient for learning styles was .819. Furthermore, accounting for learning styles in the regression resulted in an increase in the percentage of variance explained from 18% in the second regression to 60% in the third regression. This indicates that the effect of teaching styles on achievement motivation is indirect (through learning styles) rather than direct, and therefore that learning styles is a mediator of teaching styles on achievement motivation. Since the relationship between teaching styles and achievement motivation dropped to effectively zero, indicating that learning styles is a perfect mediator of knowledge on achievement motivation of students.

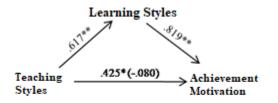


Figure 4.1 Mediation Analysis

The mediation effect of learning styles between teaching styles and achievement motivation is summarized in Figure 4.1 which is the standard representation of a mediation study wherein the arrows indicate the relationships between variables, the values were standardized beta coefficients, and *p*-values were indicated with asterisks. The value in the parentheses (-.080) is the effect of teaching styles on achievement motivation when controlling for learning styles, while the value to the left of the parentheses (.425) was the effect of teaching styles on achievement motivation before accounting for learning styles.

#### CHAPTER 5

# SUMMARY, FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

# 5.1 SUMMARY

The current line of investigation was co-relational in nature. The study comprised of three variables like teaching styles as perceived by the students, learning styles and students' achievement motivation at secondary school level. Initially, this line of investigation aims to examine the teaching style as perceived by the students. Six teaching styles of Grasha as Personal Model, Delegator, Facilitator, Expert Style and Formal Authority were taken into account. Second objective of the present research was to inquire upon commonly used ways of erudition of secondary school students. A component of VAK Model, Visual Learning Style was taken into account. Another component, Auditory Learning Style was taken of this model. Furthermore, last component named Kinesthetic Learning Style of the applied model was used to get the information regarding apprentices' preferred LS. Besides these, the current line of investigation aimed to explore the students' achievement motivation at secondary school level. For the purpose of achieving the set objective, McInnerney's Achievement motivation Theory was used. In essence of this approach, students' achievement Motivation was measured on three factors like social goals, mastery goals and performance goals of achievement motivation of secondary school level students.

A major objective of this research was to examine the interrelationship of the three variables of the study as teaching styles as perceived by the students, ways of erudition and attainment motivation of apprentices at secondary school level. Percentages, mean scores and mediation analysis were used to analyze the results. All students from public sector schools in Tehsil Rawalpindi were chosen as population of the present study in Tehsil Rawalpindi. Total 521 students were selected as sample of the population. 521 students were chosen from 50 secondary level schools. In order to select schools, random sampling technique was applied. Return rate was 95.5%. Questionnaires were employed as examining instruments for the purpose of collecting data. To get the desired information regarding variables of the line of investigation, three questionnaires were developed. First questionnaire was for Teaching Styles as perceived by the apprentices. The other questionnaire for the present line of investigation was regarding Learning Styles. Thirdly, there was questionnaire concerning Students' Achievement Motivation. Reliability of these research tools was tested through SPSS-IBM Version 22, by pertaining Cronbach alpha Coefficient. Data were gathered by personal visits of the researcher. After collecting data, it was analyzed through SPSS followed by interpretations. Major findings and conclusions of the present line of investigation were that Formal Authority TS was the most frequently used TS as perceived by the apprentices of high grades schools. A mean of 4.17 students preferred Formal Authority TS, as most effective TS as perceived by the students. Mean score of 4.11 of students preferred facilitator teaching style while an average of 3.89 of students marked expert teaching style as most effective teaching style for them.

Another conclusion can be drawn from the present line of investigation that visual LS. Along with this, it was also drawn from this line of investigation that auditory LS was the most preferred LS among apprentices of high grades at schools. As far as the result of third variable i.e students' achievement motivation at secondary level is concerned, it was observed that an a mean 4.25 of students were motivated highly when their mastery goals were achieved while they were less motivated when their social goals were achieved. Results of this research study indicated that interrelationship of teaching styles as perceived by the students, learning styles and students' achievement motivation of secondary level school students was found significant. Result was also drawn from this line of investigation that there was significant relationship between TS and LS of apprentices of high grades at schools. This can also determine that connection between Teaching Styles as perceived by the students and students' achievement motivation was also significant. Relationship between learning styles and students' achievement motivation was also found significant.

#### 5.2 FINDINGS

Based upon the objectives of the present line of investigation, following findings were drawn from the interpretation of data analysis.

**Objective -1: "To** explore various teaching styles as perceived by students at secondary school level."

1. Mean wise difference in different five sub factors of TS as perceived by the students was found. It was found that mean score of formal authority TS was the

highest i.e 4.17 among all other factors. And the lowest value was of personal model TS as perceived by the students. It was 3.67. The mean wise difference of facilitator was also high; 4.11 and was close to formal authority TS. The mean value of other sub factors, expert TS is 3.89 and delegator TS was 3.81 (See Table 4.13)

**Objective-2:** "To determine the learning styles of students at secondary school level."

The research study depicted that the mean wise differences in three sub factors of LS. It was concluded from this study that mean score of visual and auditory LS were higher and these were 3.8 and 3.8. The lowest value is of kinesthetic i.e. 3.15 (See Table 4.14).

**Objective-3**: "To investigate the level of students' achievement motivation at secondary school level"

3. The research study exposed that mean score of students' achievement motivation was 4.08 that was a good score. Mean differences of three sub factors of Students' Achievement Motivation were drown from the research study. It was found that mean score of mastery goal was higher. Its value was 4.25.Mean scores of other two factors of achievement motivation goal, as social goal and performance goal were 3.85 and 4.13 respectively (See Table 4.15).

**Objective-4**: "To examine the interrelationship of teaching styles as perceived by students, learning styles and students' achievement motivation at secondary school level."

- 4. In the first regression, teaching styles was a significant predictor of learning styles (p = .008), explaining 38% of the variance and having a standardized beta coefficient of .617. This indicates that a student's learning depended on how much teaching styles were effective and results showed that teaching styles was significant for the students' learning (See Table 4.16).
- 5. In the second regression, teaching styles was a significant predictor of achievement motivation of students (p = .040), explaining 18% of the variance and having a standardized beta coefficient of .425. This indicated that a student's achievement motivation depended on how much teaching styles were effective. (See Table 4.16).
- 6. In the third regression, learning styles was a significant predictor of achievement motivation (p= .002). This indicated that a students' achievement motivation depended on their learning styles. Additionally, when achievement motivation was accounted for in the third regression, teaching styles was no longer a significant predictor of achievement motivation (p = .715) and the standardized beta coefficient for teaching styles fell to effectively zero (-.080) while the standardized beta coefficient for learning styles was .819 (See Table 4.16).

# 5.3 CONCLUSION

Keeping in view the objectives of presently conducted line of investigation, following conclusion were drawn:

1. Formal Authority teaching style was the mostly preferred teaching style in view of students of secondary level school.

- 2. Visual and auditory learning styles were the mostly preferred learning styles among secondary school students.
- 3. Students were motivated highly when their mastery goals were achieved.
- 4. Teaching styles played a significant role in students' achievement motivation but taking teaching styles and learning styles as predictor in the presence of learning styles made teaching styles insignificant for achievement motivation of students at secondary level.

# **5.4 DISCUSSION**

This line of investigation was conducted for the purpose of exploring the ways of instruction in the perception of apprentices, ways of erudition and student's accomplishment motivation at secondary school. Furthermore, it was conducted to investigate the interrelationship among ways of instruction in the perception of apprentices, ways of erudition and students' accomplishment motivation at secondary school grades. Grasha Teaching Styles were used in order to get information about the mainly recurrently applied and effective ways of instruction in the perception of apprentices at secondary school level.

Grasha Teaching Styles were used in order to get information about the mainly recurrently applied and effective ways of instruction in the perception of apprentices at secondary school level. The study exhibited that Formal Authority way of instruction was the mostly preferred way of instruction in view of students of secondary school level because the most essential for the trainers was tom formulate ways of instruction that marked the differences in way of erudition of apprentices. Instruction styles were deeply influential for the apprentices' scholastics accomplishment impetus. A good trainer had major concern with the apprentices' attitude regardless of his information (Orlando, 2013). Moreover, research evaluates that every teacher has different learning style, philosophical approach and understanding regarding the styles of learning. It is universally accepted that, styles always have impact on students' capabilities and level of understanding. The interest building and consistently engaging the attention of student is a tough challenge for teachers (Shiekh & Mahmood, 2014). This study investigated that the prominent and very ducky style of teachers were "Delegator" which is basically appeasing and forcing students for learning. Moreover, next two styles used respectively were "Expert" and "Role Model" both of which empower teachers and grants central role to teach. These results were quite similar with the works of Angela (2014), in which it has been determined as the event that a measurably huge contrast existed in the numerical accomplishment of rudimentary understudies in homerooms driven by educators with various predominant instructing styles which is proposed by Grasha (1996) teaching methods and based on numbers of years of teaching experience. The discoveries of this examination uncovered that instructors utilizing facilitator and delegator showing styles altogether higher than understudies in homerooms of educators utilizing master, formal position, and individual model instructing styles. The study of well-known researchers Simelane and Mji (2014) proposed technological development at the strategic levels for better progress. The researchers examined that, "technology-engagement teaching strategy" (TETS) which triggered the exposing level of learning of students in Mathematics. Further, for enhancing better progress, the researchers timely and repeatedly assessed the participants' engagement with technology and its impact on their

minds. However, after analyzing data, researchers diagnosed that, the relevant operation of TETS with Aid of Clickers drastically improved the apprentices' learning progress.

One of the line of investigation regarding teaching styles and adolescent's psychological development was conducted by Khurshid and Aurangzeb (2012). One of the major objectives of this line of investigation was to explore different teaching styles. A sample of 130 students and 45 educators from three intermediate level colleges of Rawalpindi Region were taken as the sample of this line of investigation. This line of investigation was based on the theory of Grasha Teaching style. Major findings were that personal model teaching style was most prevalent teaching style. Moreover, this style had positive correlation with adolescent psychological development.

The researcher used VAK Learning Style model in the was applied in the present line of investigation in order to determine mostly preferable way of erudition at secondary school level. The research findings exhibited that visual and auditory learning styles were the mostly preferable learning style among secondary school students. The researcher used VAK Learning Style model in the was applied in the present line of investigation in order to determined mostly preferable way of erudition among secondary school level. The research findings exhibited that visual and auditory way of erudition were the mostly preferable way of erudition among secondary school level. The research findings exhibited that visual and auditory way of erudition were the mostly preferable way of erudition among secondary school grades apprentices. Conclusions and findings of the present line of investigation are helping aid further awareness of learning styles of public sector schools at secondary level. After getting the awareness of preferable learning style, a quality of seeking knowledge was to inculcate in the students, which suited for his/her preferable learning style. This

knowledge of awareness of learning style would back up the learner to teach them by the teaching method that are in accordance with their learning styles preferences. A major symbol in erudition is to gain knowledge to get accomplishment in life. It should be an objective of the instruction and erudition procedure to strengthen the apprentices to gain facts and ideas influentially which could move and alter, regardless of any aid or assistance from others (Kazu, 2009). Drysdale et al. (2001) established a line of investigation. This line of investigation was mainly aimed at exploring whether information regarding ways of erudition of apprentices had influence on learners' scholastics accomplishment. They exhibited that ways of erudition significantly affected the scholastic accomplishment of apprentices in 11 of the 19 courses.

Dawood Al Hamdani(2014) conducted a study for the exploration of way of erudition of Gulf University students. The sample was 267 SU learners and he determined what type of learner they were; visual, auditory or kinaesthetic.75% females and 25% male were selected. He found that there was no dominant LS.

Peacock (2001) investigated the priority regarding learning style of students of English as Foreign Language and English as Second Language. The outcomes of these researches showed that students were in favor of kinesthetic way of erudition at top priority on any else, whilst usually used instructional techniques that suited the aural apprentices.

Different lines of investigation were also conducted to investigate preferred styles of students in Pakistan at different level. One such study was carried out by Irfan et al. (2012) to investigate learning styles preference among students. The researchers used

Honey and Mumford learning styles inventory to explore preferred learning styles of the students. Conclusion of this line of investigation exposed that there was diversity of learning styles among students and commonly had the reflector learning styles while some student commonly has activist learning styles predominance. This entitles for assortment of directional and evaluation modalities to go with them. The study of Rahmatullah et al. (2013) used Kolb learning styles model to investigate the preferred learning styles of students. It was revealed that dominant way of erudition of apprentices was Assimilator as compared to other learning styles. The result indicated that students with convergent learning style had higher achievement than the other learning styles. These results were also quite similar with the works of Riazi and Riasati (2007), Kassaian (2007) and Kia, Ali and Ghaderi (2001) One of the latest studies established by Riazi and Riasati (2007) gave principles to learning styles of Iranian learner of English as Foreign Language. It was concluded that these learners gave priority to an active participation of classroom procedures. They approached to have communication and relation with other learners in the classroom.

Kassaian (2007) explored the impact of two kinds of instructional strategies on the learning of new expressions. Sixty-six institutions of higher education apprentice possessing an auditory way of erudition, or a visual way of erudition were involved in instructional strategy settings which were either related to visionary senses or aural senses. Data that was analyzed showed that: 1) the course of study with visual way of erudition gained language materials they had grasped visually is more effective as compared to the materials that grasped in aural way. But the course of study grasped aurally did not seem to be course of study that grasped the material they had grasped aurally2) Every course of study of all the subjects gained visually presented material in a good way as compared to aurally presented items in the instant and impediment experiments.

Kia, Ali pour, and Ghaderi (2001) conducted a line of investigation. They explored that among the apprentices in Payame Noor institution of higher education in Iran, those with ways of erudition involved visually possess the greatest scholastic accomplishment.

Students' differences draw a line of distinction to various styles of their learning. It carries great weight age for teachers to determine students' differences regarding their learning styles. When teachers had the knowledge of students' preferences, was valuable and helpful for teachers to be careful in his/her handling of students' differences with which students came to the classroom (Felder and Spurlin, 2005). Rajshree (2011) exposed that mostly the preference of students inclined towards kinesthetic learning style. Further, investigation showed that this learning style was highly correlated with that of students' academic achievement. Learners can be divided into three styles like visual learner, auditory learner and kinesthetic learner (Alum ran, 2008). Study of Morrison(2010) revealed that 30% of the population comprised auditory learners.

The awareness of self-way of erudition was inevitable for apprentices and trainers. This actually handled the erudition procedure. Way of erudition was imperative on various grounds; nevertheless, three of them were fundamental. The foremost one was the variation in individual's way of erudition as by nature there were diversities in individuals. When a personage takes the accountability of their selves' erudition, it might

cause the effectiveness of learning process. So then, to cope this problem, it was imperative for personage to be aware of his preferences regarding the ways of erudition. For the effective learning learner kept the knowledge of the features of that way of erudition. The exposure of erudition procedure can be fostered well when all built up a familiarity of their selves' formulation of way of erudition. This was a source of satisfaction for them with the environment in which he/she was interacting. He/she took all opportunities of learning as a chance. By adopting such manner, it became possible for personage to possess and attain the continuously varying knowledge (Cofield's, 2004). It was depicted from various lines of investigations there were so many LS that a person possessed. These researchers showed that among all those LS, that an individual possess, one of the LS was dominant. Others existing LS were comparatively at a reduced amount of prevailing. In the present of so many LS that a person possessed, the degree at which they were used, could be changed (Tamel, A, 2002). Vincent and Ross (2001) explained that most educators agreed upon the existence of ways of erudition and their influences on erudition process. Kaurse (2000) said that not a single method was best for all students but variedly depended upon individual learner. He found that it was possible for many apprentices to grasp minute knowledge wrongly very quickly especially when they capitalize could their way of erudition's strength. Philips, et al. (2001) found that different activities were found to be involved in men and women when engaged in different activities e.g., reading, listening, experiencing emotion etc. The study examined by the Puja and Ahmad (2016) in which research diagnosed the dominancy of learning and enhancing methods regarding the history student's education. This discourse used the Myer-Briggs type of learning style as an indicator which was respectively explained as,

extrovert, sensing, intuition, thinking, feeling judging and perceiving. The study was based on the Sample of 600 students apparently from class second year in 2012 and from class third year of session 2013. This area of study was undertaken from world emerging universities of History studies, the University of Jember and University of Bandung Indonesia's apprentice sample was being evaluated by the researcher. The nature of this study was descriptive and further SPSS tool had been used by the researcher for analyzing the portion of data in chapter of data analysis. However, research results described that, the learning technique at higher level was been promoted by the teachers for better understanding. However, researchers proposed the implication that this sort of learning made and reshaped progress at higher level. For better understanding and evaluation, the policy followed this method for initiating progress at this level.

The researcher Syofyan and Siwi (2018) designed study in which they explained the learning habits of Economics students. Their review regarding literature explained that learning styles repeatedly impacted on apprentices' progress. However, researchers gathered data from 100 students as sample of the study and research instrument (questionnaire) was designed for collecting data from selected sample regarding the learning styles and its impact. In this regard, researcher evaluated that, the students of "economic education students" deeply prompted and varied familiarity with visual learning style which dramatically boosted their learning capabilities.

For the purpose of measuring the students' academic accomplishment impetus, McInnerney achievement motivation theory was used. Result drawn from this research showed that students were motivated highly when their mastery goals were achieved. One of the major findings of the present line of investigation was that apprentices generally exhibited above level of accomplishment impetus accomplishment motivation at school stage as descriptive statistics of the present line of investigation depicted that apprentices assisted others, showed that student helped others, paid tribute, be aware of self-assurance regarding performing their school task, performing good as compared to others and when he was assigned the obligation of head of a team, presented above level of accomplishment impetus. Such result was also carried out by the conclusion of Dowson and McInerney (2001) and Pintrich (2000)who concluded that the accomplishment impetus was a thrust to proceed in erudition task and pursuit leaning to objective deportment in formulation of combined interface, competence regarding content and presenting tremendous work that was handing over to them. It was very supporting in achieving learning attitude that improved by keeping other happy. It might possibly develop apprentices' ideas and by admiration, assisting and keeping people happy improved their objective leaning attitude at school stage. This finding was quite similar with the results of Dowson, Barker and McInerney (2003) research work. Mastery goals were related with expertise and an increase of information and comprehending by putting efforts in learning (Murphy & Alexander, 2000). Those learners who opted for goal had achievement customary developed by themselves. They perceived success in the form of mastery and learning. Learning and motivation was affected by mastery goal in a positive way. These goals were interrelated with highly cognitive tasks, self-efficacy at higher degree, to get target and problem solving (Anderman, Maehr, and Midgley, 1999). Performance goals referred as a wish to obtain positive judgments and avoid unfavorable judgments of an individual's expertise and their worries (Murphy & Alexander, 2000).

Fourth major result of this study was that teaching styles played a significant role in students' achievement motivation but taking teaching styles and learning styles as predictor, presence of learning styles made teaching styles insignificant for achievement motivation of students at secondary level. Matching between learning styles of students and teaching styles of teachers were significant for smooth and effective teaching and learning. If there existed a mismatch between teaching style and learning style, then it became difficult for teachers to improve students' academic performance. The findings also showed that correlation was significant between teaching styles and student's learning style. The study of Nasreen et al. (2012) exhibited that teaching styles and learning styles were positively correlated.

Ways of erudition illustrated simply the way in which students gain knowledge. This implied that teacher's teaching style dealt with how a student preferred to learn in classroom. Although it was not realistic to expect a matched learning style and teaching style (Gibson, 2001), a teacher must keep a catalogue of instructional techniques and methodology, teaching methods and strategies to make ways of erudition of apprentices vigorous. Studies showed that matching teaching styles with students' learning style could improve students' learning achievement (Safarikova, 2016).Vincent and Ross (2001) explained that most educators agreed upon the existence of ways of erudition and their influences on erudition process. Kaurse (2000) said that not a single method was

best for all students but variety of it, depended upon individual learner. He found that it was possible for many apprentices' to grasp minute knowledge wrongly very quickly their way of erudition's strength. Philips, et al. (2001) especially when capitalizing found that different activities were found to be involved in men and women when engaged in different activities e.g., reading, listening, experiencing emotions etc. The study examined by Puja and Ahmad (2016) diagnosed that dominancy of learning and enhancing methods regarding the history student's education. This discourse used the Myer-Briggs type of learning style as an indicator which was respectively explained as, extrovert, sensing, intuition, thinking, feeling judging and perceiving. However, research results described that the learning technique at higher level was promoted by the teachers for better understanding. Regarding the importance of adjustment in improving learning and adaptive behaviors of students, the study concerning about the very important aspect of leaning and behavioral change of students, was designed by Khandagh and Farasat (2011) which is being organized for underlying the concept of two types of learning. For this research instrument, teacher and students were examined by researcher for understanding the student's emotional, educational and economic progress. The research diagnosed that those teachers who used active style their students were very familiar with learning and could adjust with social sector while those using inactive style their students were mostly less active and less familiar with social issues. The result showed that, all this happened and was based on style of learning. However, researcher explained that there were differences between active styles and inactive style which as being used by teachers for social and emotional learning. But it had been proven that social adjustment significantly progressed in both styles of teachings. The researchers Aldajah,

Haik and Moustafa (2014) showed that the understudies learning styles are adjusted: dynamic intelligent, natural sensor, visual-verbal and they lean toward worldwide over the successive learning style. Additionally, the teacher's instructing styles were a blend of master, formal-authority, individual model and delegator. This range of showing addresses the vast majority of the understudies learning techniques, which considered emphatically the learning cycle. İlçin, Tomruk and Yeşilyaprak (2018) diagnosed about the learning style and academic progress to understand about the progress of physiotherapy students. The study examined the impact of learning style on student progress. For this instance, the learning style of 184 student of physiotherapy was evaluated by the researcher while adopting the method of "Grasha-Riechman Student Learning Style Scales". However, CGPA scaling was being used by the researcher for scaling and measuring the level of progress. The Kruskal-Wallis test was used by the researcher for the conduct of learning style groups (Independent, Dependent, Competitive, Collaborative, Avoidant, and Participant). It was diagnosed that Turkish Physiotherapist student sare most dominantly attached and familiar with "Collaborative Learning style". However, it was investigated that the style was more active and advance which impacted on the minds of students. The teaching style on Turkish students drastically increased the progress of students. The researcher reported that the area where teaching styles had more better progress as compared to other blocks in Turkish Schools. The research explained that this study used for understanding the nature of style which had impact on students' minds. However, it was proven that numerous learning styles reshaped and boosted progress of students.

The study of Ridwan, Sutresna and Haryeti (2018) in which teaching styles and learning styles were examined. However, the correlation of this study exposed that the 15 teachers and 188 students' simple random sampling technique used. However The SAILS and VARK questionnaires style is used for analyzing the teaching and learning style via online methods of learning. The frequency, percentage, chi-square and Mann-Whitney analysis with SPSS version 20 were being used for analyzing the study. However, many of the teachers highlighted the "Single-Model teaching style" with Kinesthetic (K) preference, further the student chosen "All-Model (VARK) style". However, it was evaluated that there is huge difference between teaching styles and learning styles. So, it has been accepted that the teaching style sometimes does not work and teacher should adopt more than one style while students also adopted the student learning style and kept updating learning capabilities. This will initiated and progressed effectively and boosted adaptation and it was very fruitful for classroom progress requirement.

In the line of investigation conducted by Khalid, Akhter and Hashmi (2017), they tried to investigate the tenth grade auxiliary schools English educators' showing styles and learning styles of their understudies and looked at the possible connection between training learning style match with understudy's scholastic accomplishment as demonstrated by their last optional educational committee's outcomes. An example of 42 schools was chosen from the number of inhabitants in Punjab region government schools. All the English class understudies and their class educators were the respondents of this examination. Pertinent data was gathered through instructing and taking (enhancing or learning) in styles inventories from teachers and their students and English subject result was from through their applicable schools. The present condition utilized in Grasha's stock (1996) method in assorted learning styles classes identified with students and explored encouraging styles identified with educators. Grasha's stock was utilized on five sub classes of the scale. Information was dissected utilizing enlightening insights procedures. The outcomes exhibited that understudies' learning styles and their accomplishment in English course, had measurably important distinction among them and genuinely important impact was not found, between students learning styles and teaching showing styles on students' English accomplishments. The researchers Ovez & and Uyangör (2016) briefly explained in their study how much was arithmetic teacher instructing at optional school sixth, seventh and eighth grade students encourage dependent on understudies' (students) learning styles and to uncover how powerful coordinating with instructors' (students) training styles with students' learning styles in understudies' (students) accomplishments. As this exploration intended to uncover all the things considered, study model was utilized in this examination. This investigation was conducted on 700 auxiliary school apprentices and 31 instructors. The examination was led in 2014-2015 training term at 9 schools which were arbitrarily looked over Balıkesir Province Center. The information of the examination was assembled from 31 optional school math educators and 700 auxiliary schools with the assistance of learning and training styles stock scale. The consequences of this examination uncovered that educators planned the learning conditions relying upon their own learning styles and that there had been a cozy connection between instructors' learning styles, apprentices' learning styles and apprentices' accomplishments in arithmetic classes, that understudies' accomplishments increment when instructing is done dependent on their learning styles.

This investigation of Shih and Gamon (2001) broke down the connections between understudy accomplishment and the accompanying factors: disposition, inspiration, learning styles and chose socioeconomics. This populace study included 99 students taking two electronic courses offered by the school of farming at a land award college. 74 (75%) apprentices finished a learning style test, an on-line survey, and got an evaluation before the finish of the semester. The learning style test was the 'Group Embedded Figures Test" (GEFT), which characterized understudies (students) as either field-ward or field-free. The on-line poll comprised of two scales (inspiration and disposition), whose "pilot-test" reliabilities were .71 and .91, individually. More than 66% of the understudies taking the online courses were field-autonomous students; nonetheless, there were no huge contrasts (.05 level) in accomplishment between fieldward and field-free understudies. Additionally, understudies (studies) with various learning styles and foundations adapted similarly well in electronic courses. The understudies appreciated the accommodation and self-controlled learning pace and were inspired by rivalry and exclusive requirements in online learning. Inspiration was the solitary critical factor that clarified more than one-fourth of understudy accomplishment estimated by class grade.

The present research of Knaujia and Bhattacharya(2016) managed the impact of accomplishment inspiration on learning styles. The reason for this investigation was to see if there was a specific learning style of high accomplishment rationale understudies (students) and low accomplishment thought process understudies (students) or not. The examination was led on 348 optional school understudies (students) of Luck now city. To accomplish the reason for the investigation, the ILS of Richard M. Felder and Solo man

(1994) was utilized. The instrument involved 44 bipolar things for 8 learning styles: Active v/s Reflective (ACT/REF), Sensitive v/s Intuitive (SEN/INT), Visual v/s Verbal (VIS/VRB) and Sequential v/s Global (SEQ/GLO).

All 8 bipolar learning styles estimated the learning style of the students. The updated BAMI (Kannaujia & Bhattacharya, 2016) controlled on same 348 studies to gauge the impact of accomplishment inspiration on Learning Styles. BAMI structure 'A' actions 11 components of Achievement Motivation with 44 things. This examination considered just high accomplishment thought process and low accomplishment rationale students. The investigation found that there was no huge contrast in Learning Styles of high accomplishment rationale and low thought process students. They favored same learning styles to learn with the exception of touchy v/s natural learning style where obvious style did not arise.

#### 5.4 **RECOMMENDATIONS**

The present line of investigation was carried out to discover the interrelationship of teaching styles as perceived by students, ways of erudition and students' academic accomplishment motivation at secondary school level. On the interpretation and analysis of data following recommendations are made;

1. It is recommended that teacher may not stick to a single teaching style. Teacher may show flexibility in his teaching to transfer knowledge to the whole class. No teaching style is right or wrong for all objectives/disciplines. Educators may integrate these five teaching styles i.e. personal model, formal authority, delegator, facilitator and expert in classroom. Training may be given to the teachers of a teaching style that is blend different element of these styles, containing the advantages of these styles and avoiding the drawback/disadvantages of these five styles.

- 2. According to students' responses, visual and auditory ways of erudition were more dominant way of erudition of learners at secondary school level. It is recommended that learners may utilize all their three senses to gain knowledge. Auditory and Visual learners learn best through audios and videos program. Display of charts, pictures, maps, graphs, role play, making model etc. may be applied by teachers to accommodate learning styles of students. This may improve in better way students' performance. Students may be encouraged to make models and role-play to experience learning physically. Teachers may give appreciation reward and incentives to the students to boost their ability to achieve their level of achievement motivation. Teacher may monitor students to improve their confidence and give them autonomy in their learning so that their self-reliance may increase. Teacher should provide group activities to students and activities.
- 3. Teachers may give appreciation reward and incentives to the students to boost their ability to achieve their level of achievement motivation. Teacher may monitor students to improve their confidence and give them autonomy in their learning so that their self-reliance may increase. Teacher should provide group activities to students and activities.
- 4. In order to boost positive significance relationship of teaching-learning congruence emphasis may put on to promote relationship of teaching styles and learning styles and their effect on students' achievement motivation. There are teachers who have no

enough awareness of TS and LS. It is imperative to identify such teachers by school management and higher authorities.

i. Training of all such teachers is mandatory. Such type of training may also given pre-service training institutes. Workshops and seminars for teaching faculty may be arranged by DSD, QAED and principals to develop competencies among teachers regarding theoretical aspects and practical application of variables teaching styles to integrate diversified learning styles of students.

ii. Teachers may use variety of teaching materials to accommodate diversified learning styles of students i. e. charts, pictures, maps and graphs for visual learners whereas mnemonic devices, discussions, wordless music and questioning for auditory land kinesthetic learners may be accommodated by hands-on activities and group formations

#### 5.5 FUTURE RESEARCH WORK

- 1. The present research study was delimited to Grasha's Teaching style. Future studies may use other teaching styles.
- 2. A noteworthy objective of the current line of investigation was to inquire upon the dominant LS of the apprentices of high grades of schools. To explore students' preferred learning style, VAK learning style model was used. In the field of LS, there are various learning styles as Kolb, MBTI etc. These learning

styles may be taken by the researchers in coming researches regarding preferred ways of erudition.

- 3. Due to unavoidable reason and problems, present research was limited to public sector school only. Future researcher may take private sector secondary schools for further research work. All public and private sector universities of Pakistan can be taken as the sample of the study. Further line of investigation may comprise of large sample size.
- 4. This present research was carried out at secondary school level. Another active level of school education is primary. The position of primary education is like backbone of the system. Bases of education system lie on it. One of the strong recommendation is that future line of investigation may be conducted on primary schools' teachers and students. This will result in better future.

#### 5.6 LIMITATIONS

- 1. Initially, present line of investigation was limited to apprentices from public sector secondary level schools.
- Secondly, in order to get responses from students survey method was used. It is a fact that responses collected through survey questionnaire cannot help to draw emotional responses of participants.
- 3. Demographic variables of students such as age, gender, rural/urban area may be focus of future research work. Other elements may also be the focus of attention for further research studies regarding TS of teachers as perceived by the

apprentices' LS of apprentices and SAM, like family background and parental education of students. Such demographical variables of students also can be taken regarding LS and students' achievement motivation of secondary level school students and teachers may also be added as a respondent for getting the responses related to TS. Their demographic variables like age, gender and rural/urban background may also be taken in further research studies. Other factors regarding teachers may also be added in future studies, such as management experiences and in-service training of teachers, their marital status and family background in order to explore TS.

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#### APPENDICES

#### Appendix-A

#### **Topic Approval Letter**

NATIONAL UNIVERSITY OF MODERN LANGUAGES Faculty of Social Sciences Sector H-9, P.O. Shaigan, Islamabad Tel: +92-9265100-110 ext: 2093 Web: www.numl.edu.pk ML.1-2/2016/FSS Dated: 14-07-2016 Ms. Nayyer Sultana Subject: APPROVAL OF PHD TOPIC AND SUPERVISOR Reference Academic Branch's Notification No. ML.2-5/16/Adms/Acad dated 12-07-2016, the Board of Higher Studies and Research has approved the following vide its meeting held from 31st May 2016. Supervisor's Name & Designation Dr. Shazia Zameer **Education Department** NUML, Islamabad.

2b. Topic of Thesis

> "A Study of Inter Relationship of Teaching Styles, Learning Styles and Students' Achievement Motivation at Secondary Level

You may carry out research on the given topic under the guidance of 3. your Supervisor and submit the thesis for further evaluation within the stipulated time.

As per policy of NUML, all MPhil/PhD theses are to be run on turnitin by QEC of NUML before being sent for evaluation. The university shall not take any responsibility for high similarity resulting due to theses run from own sources.

5. Theses are to be prepared strictly on NUML's format that can be had from Dr. Wajiha Shahid (Education Department)

Telephone No: E-mail:

051-9265100-110 waurangzeb@numl.edu.pk

Prof. D. Sufiana Khatoon Malik Dean, Faculty of Social Sciences

Cc to

To,

2a.

Dr. Shazia Zameer (Supervisor)

#### Letter for Collecting Data

#### **Appendix-B**



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Ref. No. ML.1-2/2016 FSS

National University of Modern Languages Sector H-9, P.O. Shaigan, Islamabad Tel : 092-051-9265100-09 Fax: 092-051-9265076 Email: info@numl.edu.pk Web: www.numl.edu.pk

Date: 05-10-2016

It is to certify that Ms. Nayyer Sultana d/o Mr. Muhammad Akram Reg. No. 538-PhD/Edu/F14 is enrolled in the PhD Programme, discipline of Education, Faculty of Social Sciences, at this University.

TO WHOM IT MAY CONCERN

With a view to facilitating the candidate in gathering data for her research, you are requested to kindly provide her desired information pertaining to your organization, publications/relevant training and development material etc.

We take this opportunity to assure you that this research is a purely academic activity and the information provided by your organization will be used for research purposes only.

Sefan K

Prof. Dr. Sufiana Khatoon Malik Dean, Faculty of Social Sciences

**Appendix-C** 

#### TEACHING STYLES SURVEY

Level of Course	Discipline	
Gender	Age	
School		

Instructions: you are requested to respond on this questionnaire, in a way how you generally look, feel and think. Each statement has five options ranging from 1 to 5. You are supposed to mark one of the options for each statement according to your degree of agreement or disagreement.

**Scoring Key:** AT= Always True (5), ST= Sometime True(4), OT = Often Ture(3),

RT= Rarely True(2), NT= Never True(1)

**Teaching Styles:** - Teaching styles are referred to those methodologies and strategies which teachers use during instruction.

Sr. #	Items	NT	RT	OT	ST	AT
Α	Formal Authority					
1.	My teacher thinks that facts, concepts and					
	principles are the most important things that we	1	2	3	4	5
	should acquire.					
2	I describe my teacher as "Storehouse" of knowledge					
	who dispenses the fact, principles and concepts we	1	2	3	4	5
	need.					
3	My teacher sets high standards for us in the class.	1	2	3	4	5
4	My teacher's expectations for what he wants us to	1	2	3	4	5
	do in the class are clearly defined in the syllabus.	1	2	5	-	5
В	Expert Style					
5	My teacher guides us work on course project by					
	asking questions expressing options & suggesting	1	2	3	4	5
	alternative ways to do things.					
6	I take responsibilities for teaching part of the class	1	2	3	4	5
	session.	1	2	5	т	5
7	My teachers' expertise is typically used to resolve	1	2	3	4	5
	disagreement about content issue.	1	2	5	т	5
8	Eventually I begin to think alike my teacher about	1	2	3	4	5
	course content.	T	2	5		5
С	Facilitator					
9	My teacher spend time consulting with us on low to	1	2	3	4	5
	improve our work on individual and / or group	1	2	5	•	5

- V					
	1	2	3	4	5
independently is an important goal of my teacher.	I	2	5	т	5
My teacher provides me clear guideline in this		2	2	4	5
course.	1	Z	3	4	5
My teacher gives us a lot of personal support and	1	2	2	4	5
	I	2	3	4	5
Delegator					
My teacher allows me to design one of more self-	1	2	2	4	5
	1	2	3	4	5
	1		-		~
	I	2	3	4	5
		-	-		_
	1	2	3	4	5
•	1	2	3	4	5
· · · · · · · · · · · · · · · · · · ·					
-	1	2	3	4	5
	1	2	3	4	5
in order to master course content	1	2	5	-	5
My teacher often uses examples from his personal	1	2	2	4	5
experiences to illustrate points about the material.	1	2	3	4	3
My teacher standards and expectations help us to	1	2	2	4	5
develop the discipline that need to learn.	1	2	3	4	5
	My teacher gives us a lot of personal support and encouragement to do well in this course.DelegatorMy teacher allows me to design one of more self- directed learning experiencesMy teacher encourages small group's discussions to help us develop our ability to think critically.My teacher gives us choices among activities in order to complete course requirement.My teacher assumes the role of a resource person who is available to students whenever we need help.Personal ModelOur teacher's standards and expectations are strict and rigid.My teacher typically shows us how and what to do in order to master course contentMy teacher often uses examples from his personal experiences to illustrate points about the material.My teacher standards and expectations help us to	To develop the ability of thinking and working independently is an important goal of my teacher.1My teacher provides me clear guideline in this course.1My teacher gives us a lot of personal support and encouragement to do well in this course.1Delegator1My teacher allows me to design one of more self- directed learning experiences1My teacher encourages small group's discussions to help us develop our ability to think critically.1My teacher assumes the role of a resource person who is available to students whenever we need help.1Personal Model1Our teacher's standards and expectations are strict and rigid.1My teacher often uses examples from his personal experiences to illustrate points about the material.1My teacher standards and expectations help us to 11	To develop the ability of thinking and working independently is an important goal of my teacher.12My teacher provides me clear guideline in this course.12My teacher gives us a lot of personal support and encouragement to do well in this course.12Delegator12My teacher allows me to design one of more self- directed learning experiences12My teacher encourages small group's discussions to help us develop our ability to think critically.12My teacher assumes the role of a resource person who is available to students whenever we need help.12Personal Model12My teacher typically shows us how and what to do in order to master course content12My teacher standards and expectations help us to 12	To develop the ability of thinking and working independently is an important goal of my teacher.123My teacher provides me clear guideline in this course.123My teacher gives us a lot of personal support and encouragement to do well in this course.123Delegator123My teacher allows me to design one of more self- directed learning experiences123My teacher encourages small group's discussions to help us develop our ability to think critically.123My teacher assumes the role of a resource person who is available to students whenever we need help.123Personal Model123Our teacher's standards and expectations are strict and rigid.123My teacher often uses examples from his personal experiences to illustrate points about the material.123	To develop the ability of thinking and working independently is an important goal of my teacher.1234My teacher provides me clear guideline in this course.1234My teacher gives us a lot of personal support and encouragement to do well in this course.1234My teacher allows me to design one of more self- directed learning experiences1234My teacher allows me to design one of more self- directed learning experiences1234My teacher allows me to design one of more self- directed learning experiences1234My teacher encourages small group's discussions to help us develop our ability to think critically.1234My teacher assumes the role of a resource person who is available to students whenever we need help.1234Our teacher's standards and expectations are strict and rigid.1234My teacher often uses examples from his personal experiences to illustrate points about the material.1234

## Appendix-D

# **VAK Learning Styles Questionnaire**

# Please answer all the questions and tick the answer that best corresponds with your opinion according to the following answer scale.

AT= Always True (5), ST= Sometimes True (4), OT= Often True (3), RT= Rarely True (2), NT= Never True (1)

S#	Statements	NT	RT	OT	ST	AT
1.	When I concentrate something, I focus on the	1	2	3	4	5
	words or the pictures in front of me.					
2.	My first memory is of looking at something.	1	2	3	4	5
3.	When I have to revise for an exams, I generally	1	2	3	4	5
	write lots of revision notes and diagrams.					
4.	Most of my free time is spent on watching	1	2	3	4	5
	television.					
5.	I find it easiest to remember faces.	1	2	3	4	5
6.	I write notes of all lectures in the class	1	2	3	4	5
7	I usually need verbal direction.	1	2	3	4	5
8.	I use verbal explanation while teaching something	1	2	3	4	5
9.	My first memory is of being spoken to.	1	2	3	4	5
10	I first notice how people speak.	1	2	3	4	5
11.	I easily remember people by their names.	1	2	3	4	5
12.	I easily remember jokes that I heard.	1	2	3	4	5
13.	During my free time, I mostly enjoy playing sport	1	2	3	4	5
	or doing something by myself.					
14.	When I concentrate, I move around a lot, fiddle	1	2	3	4	5
	with pens and pencils and touch things.					
15.	My first memory is of doing something.	1	2	3	4	5
16.	I think better when I move around.	1	2	3	4	5
17.	When I am anxious, I can't sit still, I move around	1	2	3	4	5
	constantly.					
18.	I would start to do things rather pay attention to	1	2	3	4	5
	direction.					

#### **Appendix-E**

# **QUESTIONNARIE FOR STUDENTS**

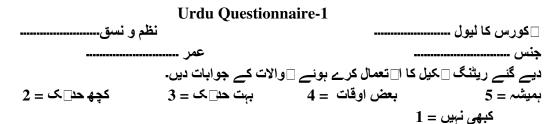
# **Students' Perception about Achievement Motivation**

By using the given rating scale answer the following questions.

**Scoring key:** AT= Always True (5), ST= Sometime True (4), OT= Often True (3), RT= Rarely True (2), NT= Never True (1)

Achievement motivation: "Feelings of personal mastery, physical satisfaction, praise and a need to attain reward is called Achievement motivation"

Sr.No	Items	NT	RT	OT	ST	AT
<b>A.</b>	Social Goals					
1	I am most motivated when I work with others.	1	2	3	4	5
2	I am most motivated when I am in a group.	1	2	3	4	5
3	I am most motivated when I am helping others.	1	2	3	4	5
4	I am most motivated when I am showing concern for others.	1	2	3	4	5
5	I am most motivated when I am notice by others	1	2	3	4	5
В	Mastery Goals					
6	I am most motivated when I see my work improve.	1	2	3	4	5
7	I am most motivated when I am good at something.	1	2	3	4	5
8	I am most motivated when I solve a problem.	1	2	3	4	5
9	I am most motivated when I am becoming better at my work.	1	2	3	4	5
10	I am most motivated when I am confident that I can do my school work.	1	2	3	4	5
С	Performance goals					
11	I am most motivated when get a reward.	1	2	3	4	5
12	I am most motivated when I get good marks.	1	2	3	4	5
13	I am most motivated when I am in-charge of a group.					
14	I am most motivated when I am praised.	1	2	3	4	5
15	I am most motivated when I am doing better than others.	1	2	3	4	5



ېمىشە	بعض اوقات	بېت حد _ ک	کچھ حد _ ک	کبھی نہیں	اشياء	نمبر شمار
5	4	3	2	1	□یرے ا□تاد کہتے ہیں کہ حقائق□صورات اور اصول زیادہ ضروری ہیں۔ جو ہمیں حاصل کرنے چاہئیں ۔	1
5	4	3	2	1	جیں ہے جات کر کی جب یہ ہیں ہے۔ میں اپنے استاد کو "علم کا ذخیرہ "کے طور پر بیان کرتا /کرتی ہوں۔ جو ان حقائق ،تصورات اور اصولوں کو پیش کرتا ہے۔ جن کی ہمیں ضرورت ہوتی ہے	2
5	4	3	2	1	،ے میر ے استادکلاس میں ہمار ے لیے بلندمعیار ات قائم کر تے ہیں ۔	3
5	4	3	2	1	میر ے استادجن توقعات پر ہم سے عمل کروانا چاہتے ہیں وہ سب سے پہلے سلیبس میں بیان کی گئی ہیں۔	4
5	4	3	2	1	میر نے استادکور س پر اجیکٹ پر کام کرنے کےلیے سوالات پوچھ کرمشاور تی اختیار ات کو نکالتے ہوئے مختلف طریقے سونپنے میں مدد کرتے ہیں ۔	5
5	4	3	2	1	یر ہے ہو ہے ،ویے دیرے وہ چے ہوتے ہوتے ہوتے ہوتے ہوتے ،یں میں کلاس سیشن میں حصہ لینے کی ذمہ داری اٹھاتا /اٹھاتی ہوں۔	6
5	4	3	2	1	میرے استادماہرانہ اندازمیں عام طور پر سبق کےمسئلے پرجھگڑے کوحل کرتے ہیں ۔	7
5	4	3	2	1	بالأخرمیں کورس کے متعلق اپنے استاد کی طرح سوچنا شروع کردیتا /دیتی یوں۔	8
5	4	3	2	1	،ری میرے استادانفر ادی اور گروپ پر اجیکٹ پر کام میں بہتری لانے کے لیے ہمارے ساتھ زیادہ سے زیادہ وقت گزارتے ہیں ۔	9
5	4	3	2	1	ہوتی ہے۔ آزادانہ سوچنے اور کام کرنے کی صلاحیت کو ترقی دینا میرے استاد کی منز [	10
5	4	3	2	1	ہے۔ میرے استادو اضح رہنمائی کرتے ہیں کہ اس کورس پر کیسے کام مکمل کرنا چاہتا /چاہتی ہوں ۔	11
5	4	3	2	1	پ ، مرپ ، ی ،دی میر ے سیکھنے کے عمل کے لیے نصابی سرگرمیوں اور نئی ذمہ داریوں کے لیے حوصلہ افزائی کی جاتی ہے	12
5	4	3	2	1	یے والے والی کی بالی ہے۔ میرے استادخودساختہ تجربات کے ذریعے سیکھنے کی اجازت دیتے ہیں ۔	13
5	4	3	2	1	وہ چھوٹے گروہی مباحثے کی حوصلہ افرائی کرتے ہیں ۔جس سے تنقیدی سوچ کی صلاحیت میں بہتری آتی ہے۔	14
5	4	3	2	1	ربی ہی ہے۔ میر ے استادمیر ے نصابی مقاصد کو پور اکرنے کے لیے سرگرمیوں میں اختیار ات دیتے ہیں ۔	15
5	4	3	2	1	جب کبھی ضرورت ہوتی ہے میرے استادآسانی مہیاکرنے والے کا کردار ادا کرتے ہیں ۔	16
5	4	3	2	1	حرتے ہیں ۔ ہم اپنے استاد کے معیار ات کو کچھ سخت ، تند کے طور پربیان کرتے ہیں۔	17
5	4	3	2	1	ہمارے استاد روایتی انداز میں ہمیں بتاتے ہیں کہ نصابی مواد پر عبور حاصل	18
5	4	3	2	1	کرنے کے لیے کیا کرنا ہے ،کیسے کرنا ہے۔ میر ے استاداکڑ اوقات نصاب سے متعلقہ مواد کی وضاحت کرنے کے لیے اپنے ذاتے تحریات کی مثا ایں استعمال کرتے ہیں۔	19
5	4	3	2	1	اپنے ذاتی تجربات کی مثا لیں استعم∏ کرتے ہیں ۔ میر _استاد کے معیارات اور خواہشات نظم وضبط کو بہتر بنانے میں مدد دیتے ہیں ۔ جس کی سیکھنے میں ضرورت ہوتی ہے۔	20
ا جہ	ن کا شکر ہ	تعاق			لایتے ہیں - جس کی سیہ پہنے میں مصرور کے ہوتی ہے۔	

Appendix-G

Urdu Questionnaire-II

# **VAK Learning Styles Questionnaire**

ہدایات: دیے گئے ریٹنگ اسکیل کو استعمال کرتے ہوئے جو ابات دیں ریٹنگ اسکیل : ہمیشہ = 5 کبھی کبھار = 4  $\Box$ ہت حد تک = 3 کچھ حد تک = 2 کبھی نہیں =1

	. 5	N. (**. 1	<b>N 1 5</b>		آعط و	
ہمیشہ	کبھی کبھا_	بہت حد تک	کچھ حد تک	کبھی نہیں	آئٹمز	نمبر شم⊡
5	4	3	2	1	جب□یں توجہ دیتا/دیتی ہوں تو□یں اپنے سا⊓نے	1
					لکھے ہوئے الفاظ پر یا تصویر پر توجہ دیتا/دیتی	
					ہوں	
5	4	3	2	1	یری پہلی یادداشت کسی چیز کو دیکھنا ہے۔	2
5	4	3	2	1	جب□جھے اپنے □تحان کی دہر ائی کرنا ہوتی ہے تو □یں	3
					بہت زیادہ دہر ائی کے نوٹس او اتصاویں بناتا/بناتی ہوں ـ	
5	4	3	2	1	_یرا ف∏غ وقت ٹیلی وژن دیکھنے_یں گز∏تا ہے۔	4
5	4	3	2	1	□جھے چہر ے یاد □کھنے □یں آسانی ہوتی ہے۔	5
5	4	3	2	1	ایں جماعت کے لیکچر لکھتا/لکھتی ہوں ـ	6
5	4	3	2	1	🗌 جھے زبانی ہدایا 🛛 کی ضر و 🗌 ہوتی ہے۔	7
5	4	3	2	1	جب□یں کسی کو پڑ ہاتا / پڑ ہاتی ہوں تو زبانی	8
					وضاحت كرتا /كرتي ہوں۔	
5	4	3	2	1	ایری پہلی یادداشت بولے جانے والے الفاظ ہیں ۔	9
5	4	3	2	1	یں پہلے دہیان دیتا /دیتی ہوں کہ لوگ کیسا بولتے 🗌	10
					ہیں۔	
5	4	3	2	1	□جھے لوگ نا]وں سے آسانی سے یاد □ہتے ہیں۔	11
5	4	3	2	1	□جھے سنے ہوئے لطیفے یاد□ہتے ہیں۔	12
5	4	3	2	1	∟یں اپنے فا غ وقت یں کھیلتا /کھیلتی ہوں یا خود	13
					کچھ کرتا / کرتی ہوں ۔	
5	4	3	2	1	جب□یں توجہ دیتا /دیتی ہوں تو□یں ادھر ادھر	14
					گھو_تا / گھو_تی ہوں	
5	4	3	2	1	ایری پہلی یاداشت کچھ کرنا ہے	15
5	4	3	2	1	یں جب حرکت کرتا/ کرتی ہوں تو زیادہ بہتر سوچتا 🗌	16
					/ سوچتی ہوں	
5	4	3	2	1	_یں جب_تجسس ہوتا /ہوتی ہوں تو بیٹھ نہیں سکتا )	17
	_				/سکتی بلکہ □سلسل حرکت کرتا/ کرتی ہوں	
5	4	3	2	1	□یں ہدایا□ پر توجہ دینے کی بجائے کام شروع کر 	18
					دیتا / دیتی ہوں۔	

# Appendix-H

# Urdu Questionnaire-III

					out achievement Motivatio	
					د یے گئے ریٹنگ سکول اسکیل کواستعال کرتے ہوئے جوابات دیں	:0
					يل:	5.
	3 = _£			4 = -	العشة = 5 العقن الوقاء	
				1 = 0	بی صرحک = 2 - بی فیر	
					صل کرنا:	62
		- FILST	S. Mar. C	جاز دار	ذاتی طور برکسی چیز پرعبور حاصل کرنا، جسمانی، اطمینان، سراباجانااورا	
			, , , , , , , , , , , , , , , , , , ,		دان طور بر کا پیر پر جورها ک کرماند جسمانی، سیمان مرابط مادور	
25	بعض اوقات	به وریک	بتا عد تک	تبعى نبير		1
5	4	3	2	1	יש איי " איז איני איני איני בריק בע באים איל אין לא על אינט-	
5	4	3	2	1	شى يېت تحرك دو ١٢ يول دو ب ش كرده ش دو ا	
5	4	. 3	2	1	شى بى تى كركى بوتار بولى بول دومرول كى مدركما كرتى بول-	
5	4	3	2	1	ش بات تحرك الاتا/ اوتى اول جب دومردل كالكركرة ا كرتى اول-	
5	4	3	2	1	ش بهت محرك موتا/ مولى مول جب دومر ، فصد يكس -	
5	4	3	2	1	ش ببت مترك اوتا/ اوتى اور جب ش اب كام ش بمرى و يك ارديمتى وو -	
5	4	3	2	1	ش بهت محرك اوتا/ اولى اول جب ش كى بيز ش الجعاموتا/ اولى اول-	
5	4	3	2	1	یں بہت تحرک ہوتا/ ہوتی ہوں جب میں کی سط کو عل کرتا کرتی ہوں۔	
5	4	3	2	1	مى ببت تحرك بوتا/ بوتى بون جب مي ابيخ كام ش بجر بور بايوتا / يوتى بون-	
5	4	3	2	1	یں بہت متحرک ہوتا/ ہوتی ہوں جب بٹھےا قتاد ہوتا ہے کہ میں اپنا سکول کا کام کرسکتا ارسکتی ہوں۔	1
5	. 4	3	2	1	میں ببت تحرک ہوتا/ ہوتی ہوں جب بچھانعا ملا ہے۔	1
5	4	3	2	1	میں بہت تحرک ہوتا/ ہوتی ہول جب ایچھے نمبر حاصل کرتا/ کرتی ہوں۔	1
5	4	3	2	1	ش بر تحرك اوتار اوتى اول جب ش كروب كانچارج اوتار اوتى اول-	1
5	. 4	3	2	1	یں بت تحرک بوتا ہوتی ہوں جب مرک تعریف ہوتی ہے۔	1
	4	3	2	1	یں بہت تحرک ہوتا ہوتی ہوں جب ش دوم وں سے چھا کرتا کرتی ہوں۔	-

#### **Appendix-I**

#### PANEL OF EXPERTS FOR VALIDATION OF RESEARCH

#### QUESTIONNAIRES

- 1. Dr. HukumDad (Head Of Education Department), National University Of Modern Languages, Islamabad
- 2. Dr. Muhammad Ajmal Chaudhary(Chairman, Department of Distance & Non Formal Education), Allama Iqbal Open University, Islamabad
- 3. Dr. RahmatUllah Bhatti(Assistant Professor), Allama Iqbal Open University, Islamabad

#### Appendix-J

# CERTIFICATE OF VALIDITY

Interrelation of teaching styles, learning styles and students achievement

motivation at secondary level

By Nayyer Sultana

PhD Scholar, Faculty of Social Sciences, National University of Modern Languages, H-9,

#### Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar towards her thesis has been assessed by me and I find it to have been modified adequately to assess the teaching styles as perceive by students. It is considered that the research instrument, modified for the research titled above, is according to the objectives and hypotheses of research in this questionnaire assures validity according to the purpose of research and can be used for data collection by the researcher with fair amount of confidence.

Name: <u>DY-Huham</u>bad Designation: <u>Hob Education</u> Institute:. Signature:

#### Appendix-K

#### **CERTIFICATE OF VALIDITY**

#### Interrelation of teaching styles, learning styles and students achievement

#### motivation at secondary level

#### By Nayyer Sultana

PhD Scholar, Faculty of Social Sciences, National University of Modern Languages, H-9,

#### Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar towards her thesis has been assessed by me and I find it to have been modified adequately to assess the Learning styles as perceive by students. It is considered that the research instrument, modified for the research titled above, is according to the objectives and hypotheses of research in this questionnaire assures validity according to the purpose of research and can be used for data collection by the researcher with fair amount of confidence.

-Afran Name: Designation: Institute: Signature Dr. Muhammad Ajmal Chaudhary CHAIRMAN tance. Education University, Islam :.

#### Appendix-L

# CERTIFICATE OF VALIDITY

Interrelation of teaching styles, learning styles and students achievement

# motivation at secondary level

By Nayyer Sultana

PhD Scholar, Faculty of Social Sciences, National University of Modern Languages, H-9,

#### Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar towards her thesis has been assessed by me and I find it to have been modified adequately to assess the learning styles as perceive by students. It is considered that the research instrument, modified for the research titled above, is according to the objectives and hypotheses of research in this questionnaire assures validity according to the purpose of research and can be used for data collection by the researcher with fair amount of confidence.

> Dim Rahmat Ullah Bhatti Assistant Professor Eli Oldgefetzionel Besetan Jacker Educido Departent Allama Iqbal Open University Islamabad Institute:

2.3.72

Dr. Rahmat Ullah Bhatti Assistant Professor Env Oldowi Eduction nd Bereniay Texter Eduction Department Allama Iqbal Open University Islamabad

**Appendix-M** 

## CERTIFICATE OF AUTHENTICITY

I the undersigned hereby testify that the Urdu translation of questionnaires (1) Teaching Styles Survey (2) Learning Styles Questionnaire and (3) Students Achievement Motivation is authentic and proper. The translation is comprehensible for the level it is being used.

> Name Dr Saime Mazir Designation Asst Professor Institute NUML Signature Signature

جند تبر طیوں کی فرورت سے اگر دو کر کی حابیں تو تر تھر زیا دہ اچھا ہو جانے کا پیش پھر

Appendix-N

## CERTIFICATE OF AUTHENTICITY

I the undersigned hereby testify that the Urdu translation of questionnaires (1) Teaching Styles Survey (2) Learning Styles Questionnaire and (3) Students Achievement Motivation is authentic and proper. The translation is comprehensible for the level it is being used.

Ms. Anfum Mobeen. Lectures Name Designation \_ Institute Signature

### Appendix-O

### CERTIFICATE OF AUTHENTICITY

I the undersigned hereby testify that the Urdu translation of questionnaires (1) Teaching Styles Survey (2) Learning Styles Questionnaire and (3) Students Achievement Motivation is authentic and proper. The translation is comprehensible for the level it is being used.

Name Zahida Saead Designation <u>A-P</u> Institute <u>NUML</u> Signature Zahid Succol

#### **Appendix-P**

#### **Permission of Tools**

Nayyer Raja <na.raja46@yahoo.com>

dennismm@ied.edu.hk Hi,

My name is Nayyer Sultana. I am student of Phd from National University of Modern languages, Islamabad, Pakistan, writing my dissertation titled "Effect of teaching style and learning style on students' achievement motivation at secondary level" under the direction of my dissertation's supervisor Dr. Shazia Zamir. I would like your permission to reproduce to use your achievement goal inventory. I would like to adopt and modify it in my research study. Kindly give me the permission. I shall be thankful to you. I am waiting for your reply.

Sincerely Nayyer Sultana Phd Scholar National University of Modern languages, Islamabad Pakistan

alan chapman <ac@alanchapman.com>

Nayyer Raja

Nayyer hello and thank you. Permission for your usage is automatic within the terms of using my website. I am sorry that I do not have the 'sub scale' and do not understand what you mean by this. My apologies Best wishes

Alan Chapman

### Appendix-Q

MCINERNEY, Dennis Michael <dennismm@ied.edu.hk>

Nayyer Raja

Dear Nayyer,

You have my permission to use the Inventory of School Investment. I have attached some validation articles that might be of interest.

Best of luck with your research and let me know how it goes.

#### Dennis

--

Danus M McInerney, 616 N 708 Chair Professor, Educational Psychology (adjunct) SEC. D.I., 2FL, Rim 15, FIKTEd Phone: +852 2948 6034, mob 662 73733 Enail: demission@isd.edu.hk

Honorary Professor of Australian Catholic University demcinerney @acu.edu.au

Website http://dmmcinemey.weebly.com/

Nayyer Raja <na.raja46@yahoo.com>

ac@alanchapman.com

Hi,

My name is Nayyer Sultana. I am student of Phd from National University of Modern languages, Islamabad, Pakistan, writing my dissertation titled " A study interrelationship of teaching style and learning style on students' achievement motivation at secondary level" under the direction of my dissertation's supervisor Dr. Shazia Zamir. I would like your permission to reproduce to use your learning style questionnaire. I would like to adopt and modify it in my research study. Kindly give me the permission and also send me sub scales of this questionnaire. I shall be thankful to you. I am waiting for your reply.

Sincerely Nayyer Sultana Phd Scholar National University of Modern languages, Islamabad Pakistan

alan chapman <ac@alanchapman.com>

Nayyer Raja

Nayyer hello and thank you. Permission for your usage is automatic within the terms of using my website. I am sorry that I do not have the 'sub scale' and do not understand what you mean by this. My apologies Best wishes

Alan Chapman

### Appendix-R

#### **Proof Reading Certificate**

I have read the PhD Thesis of Ms. Nayyer Sultana(Reg.# 539-PhD-Edu/F14) thoroughly that is entitled "A Study of Interrelationship of Teaching Styles, Learning Styles and Students' Achievement Motivation at secondary level". It is to certify that the thesis has been fulfilling the requirement of English language, grammar, punctuation and spellings. It is free of typing errors.

Skelman, DR. SAJID REHMAN

BR. SAJID Rentrian Headmaster Government. Boys High School Gangal Guizar-e-Quaid, Rawalpindi 31-08-2020

## **RESEARCH ASSISTANCE COUNCIL**

Specialists in Editing and Proofreading 0333-5193638

Ref # RAC/313

Date: 19 Jun 2022

#### **CERTIFICATE**

It is hereby certified that Ms. NAYYER SULTANA is a student of Ph.D Education at NATIONAL UNIVERSITY OF MODERN LANGUAGES ISLAMABD.She has done her research work titled "A STUDY OF INTERRELATIONSHIP OF TEACHING STYLES, LEARNING STYLES AND STUDENT'S ACHIEVEMENT MOTIVATION AT SECONDARY LEVEL."

The thesis was received by me for proofreading. I have gone through the whole thesis very keenly. All the grammatical errors have been corrected. The text now carries coherence and linguistic accuracy.

This might be forwarded for further evaluation as per university rules and regulations.

Edited by: Hafiz Sarfiaz Atimad

#### **Appendix-S**

#### LIST OF SELECTED SECONDARY LEVEL SCHOOLS

- 1. Govt.Faiz-ul-Islam High School, Trunk Bazar, RWP.
- 2. Govt. Pehlvi High School Faizabad, RWP.
- 3. Govt. Boys High School, Gangal, Gulzar-e-Quaid, RWP.
- 4. Govt. Islamia High School, NO.4 LiaquatBagh, RWP.
- 5. Govt. MadrissaMilliaIslamia High School, Pandora, RWP.
- 6. Govt.Faiz-ul-Islam High School No.2 Shakrial, RWP.
- 7. Govt. Elliot High School, MorgahRWP.
- 8. Govt. Boys High School, TenchBhattaRWP.
- 9. Govt.Boys High School, DhokCharagh Din, RWP.
- 10. Govt.Johar Memorial Girls High School Committee Chowk, RWP.
- 11. Govt.Girls High School Pandora RWP.
- 12. Govt.Girls High School MuslimTownRWP.
- 13. Govt. Boys High School, Morgah, RWP.
- 14. Govt. Boys High School, Bhal, RWP.
- 15. Govt. Boys High School, Sagri, RWP.
- 16. Govt. Boys High School, TakhatParri, RWP.
- 17. Govt. BoysHigh School, Sial, RPW.
- 18.Govt. Boys High School, PindJhatlaRWP.
- 19.Govt. Boys High School, JhattaHthial, RWP.
- 20. Govt.Girls High School, Dhamial, RWP.
- 21. Govt.Girls High School Adaila, RWP.
- 22. Govt.Girls High School KothaKallan, RWP.
- 23. Govt. Boys High School, ChakBeli, RWP..
- 24. Govt. Boys High School, MeraMohra, RWP.
- 25. Govt. Boys High School, JabbarDervesh, RWP.
- 26.Govt.Girls High School khayaban e Sir Syed Sector 1 RWP.
- 27.Govt.Liaqat Girls High School Bangash Colony RWP

- 28.Govt.Girls High School Safdar Abad PirWadahi, RWP.
- 29. Govt.Boys High School Dhamial, RWP.
- 30. Govt. Modern Boys High School, KohinoorMills, ,RWP.
- 31. Govt.Boys HighSchool ,Khayaban-e-Sir syed,RWP.
- 32.Govt.Modren Girls School EidGah Road, RWP.
- 33. Govt.Pakistan Girls High School Sarafa Bazar, RWP.
- 34. Govt.Khadija Girls High School Mohallah Raja Sultan, RWP.
- 35..Govt.AlphaCharistian Girls High Collage Road RWP.
- 36.Govt. Girls High School F-Block, RWP.
- 37.Govt.Girls High School Aria Mohallah, RWP.
- 38. Govt.Girls High School PAF Chaklala, RWP.
- 39.Govt.Girls High School GangalGulzar e Qauid, RWP.
- 40. Govt.High School Jhanda Chichi, RWP.
- 41..Govt.Girls High School Koh e nor, RWP.
- 42.Govt.Girls High School Westridge, RWP.
- 43.Govt.Girls High School DhokeHassu, RWP.
- 44.Govt.Liaqat Girls High School Mughal Abad, RWP.
- 45.Govt.MadrisatulBinat Girls High School Sadiq Abad, RWP.
- 46.Govt. Girls Islamia High School, Barf KhanaChowk, RWP.
- 47.Govt.Girls High School, TenchBhatta, RWP.
- 48. Govt. Boys High School, MohraDarogha, RWP.
- 49. Govt. Boys High School, Gora Bartha, RWP.
- 50. Govt. Boys High School, Ghareeb Abad, RWP.

# **Recommended Lesson Plan**

Class	9th	Date	
Subject	General Science	Time	40 min
TEACHER'S NAME:		UNIT:6	Environment and Natural Resources
	TOPIC: Envir	onmental Pollution	
Learning Objectiv	ves:		
After reading this u	unit, students will be able to:		
<ul> <li>Define the</li> </ul>	e concept related to pollution		
<ul> <li>Analyse t</li> </ul>	he factors affecting environment	t	
	inds of pollution		
	ate the ways to reduce pollution	through activity.	
<b>Teaching Method</b>			
	g methods of Formal Authority, I	Expert & Personal Model, I	Delegator and Facilitator
	will be integrated		
A-V aids			
Following AV-ai			
Whiteboa	rd		
<ul> <li>Chart</li> </ul>			
	ds		
Flash Car			
<ul> <li>Marker</li> </ul>			
<ul><li>Marker</li><li>Book</li></ul>			
<ul><li>Marker</li><li>Book</li><li>Observati</li></ul>	on sheet		
<ul> <li>Marker</li> <li>Book</li> <li>Observati</li> </ul> Previous knowled	on sheet	sed with expert and formal	teaching styles.
Marker     Book     Observati Previous knowle Presentation	on sheet dge dge of the students will be assess		
Marker     Book     Observati Previous knowle Previous knowle Tresentation Teacher will deli	on sheet dge dge of the students will be assess ver following contents with form		
Marker     Book     Observati Previous knowle Previous knowle Presentation Teacher will deli Topic: Pollution-	on sheet dge dge of the students will be assess ver following contents with form		
Marker     Book     Observati Previous knowle Previous knowle Presentation Teacher will deli Topic: Pollution-	on sheet dge dge of the students will be assess ver following contents with form		
Marker     Book     Observati Previous knowle Presentation Teacher will deli Topic: Pollution- 1. Definition	on sheet dge dge of the students will be assess ver following contents with form		
Marker     Book     Observati Previous knowle Previous knowle Presentation Teacher will deli Topic: Pollution- 1. Definition 2. Pollutant	on sheet dge dge of the students will be assess ver following contents with form		
<ul> <li>Marker</li> <li>Book</li> <li>Observati</li> </ul> Previous knowle Previous knowle Presentation Teacher will deli Topic: <i>Pollution</i> -1. Definition 2. Pollutant 3. Kinds of pollut	on sheet <b>dge</b> dge of the students will be assessive ver following contents with form ion		
<ul> <li>Marker</li> <li>Book</li> <li>Observati</li> </ul> Previous knowles Presentation Teacher will delit Topic: <i>Pollution</i> - 1. Definition 2. Pollutant 3. Kinds of pollut 4. Ways to reduce	on sheet <b>dge</b> dge of the students will be assessive ver following contents with form ion e pollution		
<ul> <li>Marker</li> <li>Book</li> <li>Observati</li> </ul> Previous knowles Previous knowles Presentation Teacher will delit Topic: <i>Pollution</i> -1. Definition 2. Pollutant 3. Kinds of pollut 4. Ways to reduce 5. Effects of pollut	on sheet <b>dge</b> dge of the students will be assessive ver following contents with form ion pollution ution		
<ul> <li>Marker</li> <li>Book</li> <li>Observati</li> </ul> Previous knowled Previous knowled Presentation Teacher will delit Topic: <i>Pollution</i> -1. Definition 2. Pollutant 3. Kinds of pollut 4. Ways to reduce 5. Effects of pollut Learning Activity	on sheet <b>dge</b> dge of the students will be assessive ver following contents with form ion pollution ution	nal authority and expert styl	les of teaching:-
<ul> <li>Marker</li> <li>Book</li> <li>Observati</li> </ul> Previous knowle Previous knowle Previous knowle Presentation Teacher will deli Topic: <i>Pollution</i> -1. Definition 2. Pollutant 3. Kinds of pollut 4. Ways to reduce 5. Effects of pollut Learning Activity The students will used bottles.	on sheet <b>dge</b> <b>dge</b> of the students will be assess ver following contents with form ion e pollution ation by I recycle the waste material with	h the guidance of teacher a	es of teaching:-
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