EFFECTIVENESS OF MASTERY LEARNING STRATEGY AND ADVANCE ORGANISERS MODEL OVER TRADITIONAL METHODS FOR TEACHING MALAYALAM

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Thesis submitted for the award of the degree of

DOCTOR OF PHILOSOPHY
in
EDUCATION

DECLARATION

I, **Bhamini. C.**, do hereby declare that this thesis entitled "EFFECTIVENESS OF MASTERY LEARNING STRATEGY AND ADVANCE ORGANISERS MODEL OVER TRADITIONAL METHODS FOR TEACHING MALAYALAM" submitted to the University of Calicut for the award of the degree of **Doctor of Philosophy** in **Education**, has not been submitted by me fully or partially for the award of a degree, diploma, title or recognition before.
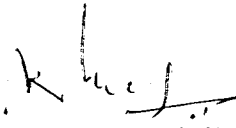
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I, **Dr. K. Karunakaran,** do hereby certify that the thesis entitled "EFFECTIVENESS OF MASTERY LEARNING STRATEGY AND ADVANCE ORGANISERS MODEL OVER TRADITIONAL METHODS FOR TEACHING MALAYALAM" is a record of bonafide study and research carried out by **Smt. Bhamini, C.,** under my supervision and guidance.

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ACKNOWLEDGEMENTS

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INTRODUCTION

INTRODUCTION

INTRODUCTION

The world around us is completely filled with organisms. All the creatures are always engaged in a variety of activities. The artistic skill shown by a weaver bird is a fine example of how they are gifted with certain creative skills and abilities. On close observation one can understand that the skills are instinctive. Such skills can also be shown through imitation or acquired by them. How ever it is clear that they help them to adjust themselves to the demands of the environment.

A human being under goes innumerable Physical and Intellectual changes from birth onwards. The changes are qualitative as well as quantitative. As such in language development also a series of changes take place during the stage of the formation of will knit sentences i.e. from cooing to babbling stage. This enables them to communicate their thoughts and also comprehend what others say. With the passage of time, they will be able to engage in different kinds of mental processes as remembering, reasoning etc. As a result of this they can solve their day to day problems and face the changing environment. Thus a person gradually develops the capacity to appreciate many events and objects in the environment. More over there are many Physical activities which a person performs with greater efficiency and a greater degree of accuracy over the years. It may be stated that a person acquires behaviour relating to knowledge, appreciation and skills. And the acquisition of a stock of behavior facilitates better adjustment with the environment.

In the course of intellectual development also changes take place from mere recognition to reasoning. All these are leading to behaviours of acquiring knowledge abilities of appreciation and developing skills.

As animals do, human beings also make use of the learned behaviours for the better adjustment with nature. These are happening as a result of a process of acquiring knowledge, modification of behaviour. imparting skills and experiences. This process is called learning According to Sharma (1997) learning is "acquiring or getting of knowledge of a subject or state by study, experiment or instruction. Learning is the modification of behaviour resulting from exercise, practice or experience. Growth, though a kind of modification is distinct from learning because it is the result of natural process. Learning can be of two types i.e. functional and dysfunctional. Functional learning leads to the development of acquiring the mastery of subjects and dysfunctional inhibits the adjustment of the individual.

From the above analysis it is clear that acquired behaviour of animals and human beings facilitate adjustment to the environment. Learning is the process by which these behaviours are acquired. Therefore learning can be defined as the process of acquisition of behaviours which facilitates adjustment.

TEACHING -LEARNING PROCESS

The major components involved in teaching and learning process are the teacher, learner and the subject matter. In the class room, the activity of the teacher is

teaching and that of the student is learning. When we analyse these two activities in detail we may realize that they are not separate entities. As teaching activity indicates the learning, it takes place and the quantity of learning will be commensurate with teaching. From this it is inferred that there is reciprocal relationship between teaching and learning. Any discussion of any one of these components would necessarily involve the other. These activities of the teacher and the learner vary according to the society in which they live. Each society lays compulsion on certain particular values, norms, skills, etc. Here teaching method should be organized according to the needs and assumptions of the learner.

Earlier the youth learned through the process of systematic imitation. Under this approach the learner was expected to imitate the behaviour and repeat it. The next approach was dialogue building,. in which everybody followed an optimum level to develop curiosity among the learners. Thinking about specific issues and arguing about these were expected to lead to learning. In our old 'Gurukula' system ample opportunities were given to the learner to argue with the 'Guru' and justify his/her views. In the way, he/she would learn how to argue logically.

The present day teaching learning system is not to suit the demands of the society. There are changes and developments in every field of life. To cope up with the changing scenario in the modern society, the pupils must be given proper training with a view to enable them to adjust in the new environment.

Problem solving ability and capability of taking decision independently are the major qualities to be developed among pupils. Hence the teaching learning pattern should be geared towards this end in view. Learning, therefore, should provide threads of active participation by the learner. For this, the learning components and teaching methods should be according to the wishes and aspiration of the society. In a democratic society teaching methods should encourage active participation and inter action among teachers, learners, parents, and the society. Hence the teachers and teaching method have major role to play.

According to Skinner (1968) "Teaching is the arrangement of contingencies or reinforcement under when the students learn. They learn even with out teaching in their natural environments. But teaching involves arranging of special contingencies which expedite learning, hastening, the appearance of behaviour which would other wise be acquired slowly or making sure of the appearance of behaviour which might other wise never occur."

Good teaching is an extremely difficult job. It is exhaustive and challenging even under the most helpful and ideal circumstances. Knowledge of subject matter along with the warmth of enthusiasm is an element for instructional effectiveness. Effective instruction needs the accomplishment of all the tasks.

The rapid technological changes have brought about new educational problems. In order to solve the problems and arrest the deterioration in standards, the quality of

teaching methods should be improved. It is only through research we can have better educational methods and make curriculum changes to meet the challenges of a highly technical and rapidly changing society.

Instructional objectives

There is no specific way to teach but there are a number of factors which contribute to the success of a teaching. The purpose of teaching is to help pupil to learn. This is the major objective of school teaching.

Usually the process of teaching takes place in class rooms. A class room needs very careful and insightful management if it is to work in support of learning. Teachers need to know how class rooms function Teaching also includes the measurement of learning experiences in class rooms.

In the teaching learning process the achievement of instructional objectives depends on the methods of teaching. Teachers follow fixed ways such as Herbartian methods, demonstration, story telling etc. in the class room. But the teachings fail to achieve a variety of instructional objectives for which teaching is designed and performed. Pupils are with different learning styles and multdimensional personalities. This throws light on the fact that the teacher should use the strategies of teaching to match the objectives of teaching and student capacities. Here arises the need for models of teaching.

The perspective teaching strategies which help to realise specific instructional goals are known as models of teaching. Joice and Weils (1972) transformed prevailing theories and theoretical knowledge into different models of teaching. According to them "Teaching is a complex activity which is a cluster of differencing roles and responsibilities. A teacher has to master multiple roles in order to become more professional. The professional competence can be expanded in two ways. Firstly increasing the range of teaching strategies that are needed to be employed. Secondly becoming increasingly skillful in the use of these strategies."

Importance of Language

Language is a boon to human society. It plays an important role in the making of one's life. It is the key to the development of an individual. One's mental, emotional, cultural and intellectual developments mainly depend upon his or her communicative ability.

Language enables us to attain the accumulated knowledge, provides foundation for knowledge, preserves man's past, moulds individual and makes a man social being. It unites the different groups and communicates, and helps the process of socialization. Language is the main vehicle to the whole process of education and it is the principal means of cultural transmission to the coming generation. It is through language, more than other means that our experiences are recorded, interpreted and extended. In the growth of human being as a social being, language has an important role.

According to Plontik (1996) Language is a special form of communication in which we learn complex rules to manipulate symbols that can be used to generate an endless number of meaningful sentences."

Chandokyopanishats points out that "with out language neither the truth nor the falseness, neither virtue or vice, can be known. The knowledge pertaining to good or bad, pleasant or unpleasant is acquired through language. Therefore it mediates on speech."

In short language has been defined as the totality of utterance that can be made a speech community. It has been said that, language as a complex of communicative symbols it is inextricably related to social activity. Of the mode of communications language is the most versatile. In analysing the linguistic phenomena within the wider context of politics and society the role of language is the speech communication and the relationships among these communications in the social and political environments are normally emphasized

Language is an integral part of human behaviour. By means of it we enrich our thinking, share our experiences with others and receive and transmit our ideas and principles to the coming generation. Language is no one's sole property. It is not the property of a poet or a writer. It is the property of human society. Every language develops through the process of giving and taking. When we study a language we receive the cultures of many languages. For example when we learn Malayalam we

can have the cultures of Sanskrit, Tamil, etc. because language is the nucleus of culture.

The major purpose of learning a language is for smooth communication with others. It helps to express clearly in a simple and comprehensive manner. It helps man to accumulate, to transmit and to review his thoughts to a large extent.

Language acquisition involves the active participation of the learner. Unlike acquiring Knowledge in any field which can be attained by listening to a lecturer or reading a book, language learning requires the learner to use the language. The closer the usage to a real life situation is the greater the likely hood that the person will master it. The purpose of acquiring a language is to communicate. Language teachers should therefore design instruction that children learn to communicate effectively in both oral and written forms.

Knowledge of the various components of language can help teachers lay an emphasis on different aspects of language which is the crucial part for its mastery. Language instruction in schools should encompass all the components and aspects of language development.

Basically the problem in language is the problem of developing proficiency in the fourfold skills of language ie. Listening, Speaking, Reading and Writing. Ability to appreciate literary form of language is an important skill to be developed through the learning of a language especially in the case of mother tongue.

Language text books contribute a major role for transmitting values and attitudes. The emotional stories, poem, play and essays in the text book contribute much information for the development of a secular outlook and a strong faith in national integration.

Importance Mother Tongue

Mother tongue is the first language which has been acquired by the child. It is the language of the heart and acquired in infancy and childhood. One acquires the milk of Mother Tongue along with the breast milk. Mother Tongue is the language with which one is emotionally identified and is the home language of the child. It is the language spoken from the cradle and is the true vehicles of mother wit. Mother Tongue is unique and could never be equalized by any later learnt language which allows one to have the cognizance of the world. But even after Fifty five years of independence the importance of the Mother Tongue in the curriculum of our schools is not being fully recognized. Zakir Hussan committee had also reiterated to provide suitable place in the curriculum. In short the importance of Mother Tongue is absolute and unchallengeable, especially in the primary classes.

Mother Tongue plays an inspiring role in the learning process of a child and has a major role for universalization of education. Scientist are of the opinion that human beings can think only in his mother tongue. In the minds of those who speak Malayalam a simultaneous translation process is happening when they speak or hear English.

Mother Tongue has been given due importance in almost all developed countries of the world. Teaching has been given enough facilities for learning our Mother Tongue from the very beginning of the Education. Teachers are also very keen in this regard. According to Johnson. "The Teacher who clearly understand the nature of his task, will have to Pre-determine the aims in his teaching in training his pupils, to use their Mother Tongue effectively and training them to respond appropriately in listening to it. At the initial stage teachers have to emphasis on oral work. It is the challenge (skill) to speak a language. Speaking comes normally and quickly to the child. More over oral expression is one of the best means for the development of personality. The next stage is reading and writing followed by providing the ability of understanding simple ideas expressed in easy sentences. Even with those two main objectives constantly in mind there are difficulties to be faced particularly the difficulty of driving steadily towards one of these objectives with out having attention and effort frequently deflected away from it but even more stubborn in the difficulty of finding out how to improve pupil's responsibilities in listening and reading and how to improve their components of language in speaking and writing."

The Mother Tongue has an added significance. It is a fact that one cannot develop ones precision of thought and clarity of ideas without acquiring the proficiency to speak in an effective way and read and write correctly and lucidly in one's Mother Tongue. More over the use of Mother Tongue is always inevitable for the acquisition of useful knowledge and information. Therefore the importance of the study of language can never be under estimated.

Malayalam is the Mother Tongue of majority of the school children in Kerala and so it is the accepted medium of instruction through out the school stage except in certain English medium schools. The first language is the mother tongue in most of the schools. It is the fundamental subject in the teaching. It decides the total efficiency of education.

Teachers being great actors on the area of teaching, education for children vests upon the teachers. It is a fact that mother tongue is the tool by which the learners understand and manipulate the environment and it is a means also for achieving personality development in the finest sense also. The emotional development and social insight of one's own can be developed through the application of Models of teaching for teaching of Malayalam. Unfortunately most of the Malayalam teachers adopt Traditional methods without having the awareness of the development already brought in the field of learning process. Therefore, it is highly essential to impart the enlightenment for the teachers working in the field of Malayalam teaching. Present study is a humble and solemn attempt of the investigator with a view to propose and identify ample and opt methodology for effective teaching of Malayalam language in the classrooms.

It is meaningless to say that when we write and speak Malayalam, we should not use the words from other languages like English, Sanskrit etc. To some extent it is impossible. There is no danger in the entrance of certain words from English in the

making of sentences in Malayalam. But considering English education as a status symbol, ignoring Mother Tongue is not pardonable.

In the case of teaching and learning Malayalam, the mother tongue most of the teachers follow the time old and hereditary method of instruction. Even though the secondary school pupils are taught various subjects through Malayalam including the language Malayalam, the mother tongue, they are not conceiving the basic elementary principles of the same. As the investigator has been working as a teacher in the secondary school for the last ten years, she has first hand knowledge about the gravity of the problem. With this end in view it is proposed to analyse the problem with respect to teaching and learning of Malayalam. As learning takes place through the language especially the mother tongue, the importance of teaching and learning Malayalam cannot be seen less important.

The over importance given to English language in our school curriculum had an adverse effect in the teaching and learning of Malayalam in Kerala. As a result of this, Malayalam is being rapidly replaced by English in every field of life like field of education, administration and law for the last few decades. It has become a fashion among our youngsters to use English only while talking with friends and colleagues. This has created an attitude of aversion towards our mother tongue.

This has also resulted in the lack of base in mother tongue and its development. Consequently in the case of teaching methodology of Malayalam, there occurred poor

performance and unscientific reforms which pushed the mother tongue backward giving over importance to English and English teachers. Generally parents of Kerala refrain from sending their children to Malayalam medium schools and thus they became proud enough to get their children educated in English medium schools. That is one of the reasons for the replacement of Malayalam by English. What ever we say we cannot neglect the importance of English as world language. It is advisable to have a good command over English. But at the same time it is a shame to ignore our Mother Tongue.

Teaching of Grammar

In the teaching learning process of grammar in Malayalam it has an important place while grammar helps the learner for the correct use of language. The right way of learning grammar is the correct use of language in the right way i.e. the learning of language and grammar takes place simultaneously Grammar is the concomitant factor of the correct use of language and learning of language. Therefore we can conclude that grammar should not be taught separately or as a different subject away from the language. But unfortunately our teachers teach grammar separately when the learner find difficulty in understanding the relationship between the learnt grammar and language. The effect of such teaching method may add monotony in learning the language, as a result of which the learner evade from learning the concerned language.

Language is a successful form of communication which arises from amazingly simple principles of words and grammar. A words is an arbitrary pairing between a sound or symbol and a meaning. Syntax or Grammar is a set of rules that specifies how we combine words to form meaningful phrases and sentences. According to Plontik (1996) Grammar refers to set of rules for combing words into phrases and sentences to express an infinite number of thoughts that can be understood by others.

In the teaching learning process of Malayalam, Grammar helps the learner for the correct usage of languages. Grammar presents the facts of a language arranged under certain categories. It is not a body of doctrines but Scientific description of the facts of language. It is a fact that teaching of Grammar helps in learning a language in a Scientific and systematic way. It helps to realise the function and significance of each category of words and to repair the disconnected pavement of a written composition or an oral speech. It gives an insight into structural details.

The grammar to be taught to the pupils should be functional grammar, the grammar that lays stress on the function of words and construction and that helps the pupils in learning to read, to speak and to write his Mother Tongue. Formal Grammar or Theoretical Grammar is too abstract to be readily intelligible to children in the primary classes. A simple beginning may be made with in 5th or 6th classes. The method of teaching grammar should be inductive until the generalization has been established and should be deductive afterwards in the application stage. Rules should be arrived at inductively and applied deductively. Definitions and rules should

not be forced on children. It is desirable to teach grammar in close connection with practice in speaking in the first stage and with practice in reading and writing in the later stages. Whatever method or devices we follow grammar must remain as means to an end.

One of the major reasons for the poor state of affairs is that the teachings of Malayalam grammar in schools are inadequate. A strong foundation in Malayalam grammar should be laid even at the earlier classes.

Now a days there is an ambivalent attitude towards the teaching of Malayalam grammar in our schools. Majority of the teachers are of the view that the grammar teaching is only a mere waste of time and child will automatically absorb the grammar of mother tongue. According to them, language teaching should not be separated because language is beyond grammar. But the experts are of the opinion that there should be a set of rules that govern the use of language. That rules should be inclusive of language teaching. But at present the teaching of Malayalam grammar has become a farce in our schools. The main reasons for this is the lack of genuine methods of teaching which makes the learning of grammar interesting. In this context it is proposed to compare the effect of Advance organizer model and Mastery Learning Model with traditional method with a view to make learning Malayalam grammar more interesting and effective.

Role of the Teacher

The role of the teacher is emphasized by various education commission and committees. Education Commission (1964-66) says. "of all the different factors which influence the quality of education and its contribution to national development the quality competence and character of teachers are undoubtedly most significant. Nothing is more important than securing a sufficient supply of high quality recruits for the teaching profession, providing them with the best possible professional preparation and creating condition of work in which they can be fully effective."

The important duty of the teacher is to create an awareness and interest in the subject in the minds of students. The reason for the pupils lack of interest in the subject maybe attributed to various reasons such as his peculiar family circumstances, his dislike for the teacher etc. Here comes the role of the teacher. If he is not able to convey his ideas systematically in an interesting manner the efforts put forth are in vain.

In our schools, teachers have various roles to play such as professional roles, curriculum designers, academic instructors, evaluators etc. For this the teachers have to up date their knowledge and information. The professional competence can be developed in two ways i.e. By developing innovative teaching technique and by acquiring deep knowledge needed in applying the technique skillfully. Educational Psychologists and experts in the field of education have developed a number of innovative strategy for effective teaching learning process.

Based on those theories our researchers have developed suitable teaching models for our schools But our teachers are not applying the strategy due to various reasons. It may be due to the fact that most of the teachers are not getting enough facility to update their knowledge. Moreover the in-service education is not sufficient. Most of them are not aware about the courses offered for improving their teaching technology. They are following the time old method of teaching strategy. Hence the learners find it very difficult and monotonous to learn Malayalam especially Malayalam grammar. Hence the investigator proposed to study the effect of Models of teaching to teach Malayalam grammar. The two models namely Mastery Learning and Advance Organizer Model which are successfully practised in foreign countries and in various parts of India are considered.

NEED AND IMPORTANCE OF THE STUDY

Academic excellence is highly valued in all societies. Its special role in a developing society like that of India needs special emphasis. High scores in the examination are often the passport to higher education and highly paid jobs.

Most of the teachers in our schools are not able to improve the level of achievement in Malayalam even though they are more competent and proficient in the subject. The poor performance in mother tongue creates lots of problems not only to the teachers but also to those who are interested in.

Achievement in Malayalam of the secondary school students of Kerala varies widely. There are so many reasons for this. Achievement is directly related to educational situations where learning and teaching are intended to go on. The performance of the students in Malayalam in the common examinations has always been unsatisfactory. Achievement in Malayalam has deteriorated in the schools of Kerala. In order to improve the status of mother tongue, the factors responsible for the poor achievement in Malayalam should be sorted out and that is the defective instructional system.

It is seen that all students do not reach the same level of achievement even after giving due allowance to individual difference in aptitudes, interests and capabilities. It has been proved that all children are not able to reach the same educational standards. This phenomenon has drawn the attention of educationalists all over the world to conduct studies to identify the factors that contribute to these variations in academic achievements.

Disparity in achievement is an indicator of the fact that there exist individual difference in learners and these individual differences should be taken into account when preparing instructional programmes. Instructional procedure cannot be made fruitful without active participation of the learners who is a product of the interaction between self with all the innate potentialities and environment.

On a study of the state average marks in the S.S.L.C. examination in Malayalam shows that achievement in the Malayalam language have been deteriorating in the schools of Kerala. In order to check this problem, a thorough change in the present teaching pattern of Malayalam is essential.

In spite of the sincere and honest efforts of the teachers, the performance of the students in the common examination in Malayalam is not satisfactory. The factors responsible for the low percentage of pass in Malayalam have not properly identified so far. Remedial measures can be taken only if the factors related to achievement in Malayalam are identified. It is hoped that the study will through light on various models of instruction in grammar.

The investigator's awareness regarding the type of teaching exist in the present school system convinced that there is felt need for a change in the teaching of Malayalam grammar. Not much works a meaningful attempt will help to liberate pupils from the clutches of the present monotonous system of grammar instruction.

The investigator earnestly feels that the study will be helpful for identifying suitable methods for imparting instruction.

The investigator feels that research in the area of achievement of Malayalam is very scanty. No systematic research has been carried out in this area. The effect of each one of the Models of teaching on achievement in Malayalam has to be studied in detail so that the proper way and means to make Malayalam learning effective could be found out.

The investigator who has been working as a Malayalam teacher got enough opportunities to acquaint herself with the instructional problems faced by the Malayalam language teachers and with various other learning problems faced by pupils in learning Malayalam. Hence the investigator intended to conduct a study to identify the effectiveness of Models of Teaching over Traditional Methods of Teaching Malayalam.

STATEMENT OF THE PROBLEM

A model of teaching is merely a tool for thinking about the teaching situation. Focus is on the acts performed by the teachers and the expected activities of the learners. The classroom activities and interactions, the use of instructional materials and the effect of these activities on learning are carefully arranged and explained in every model according to the Principle under lined in it. The scanned activities ultimately lead to certain direct and indirect meta cognitive abilities. In order to maximize learning powerful teaching models which have that advantage over individual and the group should be employed. Mastery Learning Model and Advance Organiser Model are two such models which are successfully practiced in abroad and in different parts of India including the state of Kerala.

Mastery Learning the conceptual model of school learning by Carroll (1963) was operationalized into an instructional system called Mastery Learning by Bloom (76). This has proved to be increasing the pupils' achievement and has become

prevalent alternative to traditional pedagogy (Slavin and Kurweit (1984). Studies made in the area of Mastery Learning by Yadav (1984), Patadia (1987), Vaidya (1990) and mult analysis of Bangert Drown (1986), Gurkey (1985), Gates (1986) report extra ordinary positive effects on students achievement. Ausubel (1960) proposed the theory of advance organise to help the teachers to convey large amount of information meaningfully and effectively as possible. Various claims have been made about the efficacy of Advance Organiser Model in comparison to Traditional Method of Teaching. Some studies of Ausubel (1960) Choudhari (1986) Chitrive (1983) Gonzales (1983), Budhisagar and Sansanwal (1989), Pandey (1986) reported the superiority of Advance Organiser Model over Traditional Method of Teaching. The abroad studies of Allen (1969), Weisberg (1969),Maher (1975), Kneen (1979) Darrow (1980), Dennis (1984) and Morgan (1983) have proved that Advance Organiser Model has significant effect on achievement whenever it is utilised for teaching.

Even though the effectiveness of both the models are studied separately with regard to various subjects no one has initiated to study the effectiveness with respect to teaching of Malayalam. The investigator sincerely feels that as a Malayalam teacher it is the responsibility of the self to contribute to the field of Malayalam instruction considering the great advantages and the special features of Mastery learning Model and Advance Organiser Model. The investigator decided to study the effectiveness of both the models over traditional methods for teaching Malayalam..

Title

The present study is entitled as 'EFFECTIVENESS OF MASTERY LEARNING STRATEGY AND ADVANCE ORGANISERS MODEL OVER TRADITIONAL METHODS FOR TEACHING MALAYALAM.'

TERMINOLOGY

Effectiveness

Chambers (20th century) dictionary defines it as 'success in producing the desired effect.' Websters (1990) Encyclopaedia defines effectiveness as the adequacy to accomplish a purpose or the capacity to produce the intended purpose or the capacity to produce the intended result.

In the present study the investigator proposed to measure the level of pupils achievement in Malayalam by adopting various Models of teaching such as Mastery Learning Model, Advance Organiser Model and Traditional Method.

Mastery Learning Strategy

Caroll (1963) defined Mastery Learning as teaching learning approach which asserts that under appropriate instructional conditions virtually all students can and will learn most of what is taught in schools.

For the present study Mastery Learning Strategy is considered as a model of teaching derived from the ideas of Bloom (1968) and Caroll (1963) designed to attain mastery of a learning task through variate of time and learning resources.

Here the investigator has made the treatment to the group such as teaching, testing, diagnosing and reteaching etc so as to enable all the pupils to attain the desired level of performance.

Advance Organiser Model

Advance Organiser in the model of teaching designed to strengthen students cognitive structure. It is propounded by Ausubel based on the theory of meaningful verbal learning.

According to Ausubel (1978) Advance organiser is an introductory material at a higher level of absorption generality and inclusiveness than the learning material presented before the actual learning task. Its purpose is to explain integrate and interrelate the material in the learning task with previously learned also, to help the learner discriminate the new material from previously learned material.

Eggen et al (1979) defined that Advance Organiser Model is a statement preceding the lesson that is designed to help the learner to store and retrieve material which is learned. An Advance Organiser statement is designed to introduce the material which follows and is broad enough to encompass the information.

In this study the investigator used, Advance Organiser Model of teaching by giving generalised ideas representing the actual learning task in such a way that the pupils can organise, integrate, interrelate and differentiate the new knowledge and the previous knowledge which leads to better learning. The assumption is that the test scores obtained after using the model can be used for studying the efficacy of applying the model.

Traditional Method

In this study the instruction using Herbartian steps is referred to as traditional method.

OBJECTIVES

1. To make a comparison of the effects of Mastery Learning Model, Advance Organiser Model and Traditional Methods, on the Achievement of Secondary school pupils in Malayalam.

2. To compare the effect of Mastery Learning Model and Traditional Method on pupils' achievement in Malayalam.

3. To compare the effect of Advance organiser model and Traditional Method on pupils' achievement in Malayalam.

4. To compare the effect of Mastery Learning Model and Advance Organizer Model on pupils' Achievement in Malayalam.

5. To test whether significant difference in the mean achievement scores in Malayalam exists among pupils taught through Mastery Learning Model, Advance Organiser Model and those taught through Traditional Method of Teaching with reference to Knowledge, Understanding and Application levels.

HYPOTHESES

1. There will be no significant difference in the attainment of Malayalam taught in the Mastery Learning Model, Advance Organiser Model and Traditional Method.

2. There will be no significant difference in the attainment in Malayalam language taught in the Mastery Learning Model and Traditional Method.

3. There will be no significant difference in the attainment in Malayalam language taught in the Advance Organizer Model and Traditional Method.

4. There will be no significant difference in the attainment of Malayalam Language taught in the Mastery Learning Model and Advance Organiser Model.

5. If the effects of the 3 strategies of instruction studied are studied separately with respect to the 3 major objectives of Languages, namely knowledge, understanding and application there will be no significant difference in the levels of attainment.

METHOD AND PROCEDURE

The study was aimed at finding the effectiveness of Mastery Learning Model and Advance Organizer Model over Traditional Method on Achievement of Secondary School pupils. The investigator being a High School teacher in a Government High

School in Kozhikode the population decided was the same school where she was working, namely, Beypore Government Higher Secondary School, Kozhikode. The study was carried out during the academic year 2001-2002 from 2nd July to 6th November. For that out of the 350 pupils studying in IX standard 126 were selected.. They were grouped according to their previous year scholastic achievement. They were tested for Intelligence and SES. After assigning them to different treatments namely Mastery Learning model, Advance Organizer Model and Traditional Method, pupils were tested for their prerequisites. Most of the pupils were having the prerequisites for the study. Those who were lagging behind were given enough training.

Next step in the study was teaching each group through each Model. Steps followed in each Model were according to the underlying principles in them. After the satisfactory completion of the experiment a final test, which was constructed and standardised by the investigator was administered to identify the level of pupils. With the help of statistical techniques such as one way analysis of variance and correlated t-test the effect of Mastery Learning Model and Advance Organiser Model on Achievement of Pupils in Malayalam in relation to Traditional Methods was ascertained.

Design

The present study has been conducted using the experimental design in which three comparable groups of students were taught in the three instructional strategies

with their achievements compared. At the same time a number of instructional materials were developed as the part of the study which could be used by the teachers and educational workers. Thus the study is said to be developmental in nature also.

Sample

Being an experimental study the method of sampling was purposive. The investigator selected 126 IX standard pupils from a single school in Kozhikode district. The whole sample was divided into three comparable groups on the basis of IQ, Sex and SES and taught through three different methods.

Tools

Raven's Standard Progressive Matrices.

Socio-Economic Staus scale developed by Kuppuswamy and modified by Pillai. And Subrahmanyadas.

A pre requisites test in Malayalam

(Items selected on the basis of contents taken for the study. Developed by the investigator)

Lesson plans for Mastery Learning Model (Developed by the investigator)

Lesson Plans for Advance Organizer Model (Developed by the investigator)

Lesson Plans for Traditional Method (Developed by the investigator)

Achievement test in Malayalam (constructed and standardised by the investigator)

SCOPE AND LIMITATIONS OF THE STUDY

The present study is an experimental study. The investigator compared the effectiveness of Mastery Learning Model and Advance Organiser Model over Traditional Method for Teaching Method.

The investigator forces a wide scope for the study. Since the study is developmental in nature the tools developed as a part of the study will be useful for the teachers and others those who are interested in the field. And also the study will inspire and support the teachers to use the models of teaching especially Mastery Learning Model and Advance Organiser Model for teaching in normal class room situation.

Although sufficient care has been taken to make the study comprehensive, precise and accurate there are limitation for the study due to time limit and other factors.

Some of the noted limitation are as follows.

1. The study was limited to IX standard pupils only.

2. Only a sample of 126 pupils are considered.

3. Only a single school is included in the study.

4. Only the cognitive objectives are considered among those the three knowledge, understanding and Application levels are considered.

5. The number of periods used for the treatment are limited.

6. The topics included in the study is only Malayalam Grammar that also only 7 board units are considered.

ORGANISATION OF THE REPORT

The study has been reported in five chapters.

Chapter 1: Introduction, emphasizing the need and significance, definition of key terms, objectives, hypotheses, sample, tools, techniques of analysis, scope and limitations of the study.

Chapter 2: Description and findings of related literature and studies.

Chapter 3. Methodology, procedure adopted for the study.

Chapter 4. Details of analysis of the data followed by the interpretation of the results.

Chapter 5: A short resume of the study, major findings and suggestions for further research.

Bibliography, tools etc are appended.

REVIEW OF RELATED LITERATURE

C. Bhamini "Effectiveness of mastery learning strategy and advance organisers model over traditional methods for teaching Malayalam " Thesis. Department of Adult and Continuing Education and Extension services , University of Calicut, 2002

CHAPTER II

REVIEW OF RELATED LITERATURE

REVIEW OF RELATED LITERATURE

This chapter has been divided into two parts. Part I and II. Part I deals with a Theoretical Over view of the models taken for the present study, viz. Mastery Learning Model and Advance Organizer Model and. Part II deals with empirical studies which include studies conducted abroad, studies in India and that of Kerala.

PART I

THEORETICAL OVERVIEW

Teaching is a process by which the teacher and the pupils create a shared environment including sets of values and beliefs which in turn colour their views of reality. The fundamental goal of teaching is to help students to develop to their fullest potential by giving them the necessary skills to function in their society.

According to Dewey (1916) "the core of teaching process is the arrangement of environments within which the students can interact and study how to learn. It depends upon the active, influential, resourceful and competent teachers. For this the teachers should adapt dynamic methods of teaching, ie. Learner oriented.

Bruner (1972) has emphasized four major features of theory of instruction in effective teaching, viz.(1) predisposition to learn, (2) structured body of knowledge, (3) sequences of material to be learnt and (4) the nature and pacing of reward and punishment.

ROLE OF INSTRUCTIONAL OBJECIVES

It is well established that the bases for formulating an effective instructional strategy is provided by well defined instructional objectives. This is because the objectives determine the goal and the evaluation process.

A group of college and university teachers headed by Professor Benjamin S. Bloom (1956) developed a detailed classification of educational objectives. All human behaviour can be classified under the broad categories or domains; cognitive, affective and psychomotor corresponding to the knowing, the feeling and the doing aspects of behaviour. Thus objectives become the fundamental concept that gives meaning and direction to education.

INSTRUCTIONAL OBJECTIVES AND MODELS OF TEACHING

To achieve these educational objectives or goals different teaching strategies must be practised by the teachers. There are a number of teaching models developed to realise specific instructional goals. These models of teaching have been developed on the ascertain that a single best way to teach does not exist and as such different models of teaching are required to realise different instructional goals. Each model represents a view on what is important to learn and how it should be learnt. A teacher to be effective should be able to recognise different instructional goals and select appropriate ;teaching models to realise specific instructional goals.

MODELS OF TEACHING -- CONCEPT AND DEFINITIONS

Any improvement in education should essentially reflect changes in the process of teaching because major part of formal education is carried in the form of class room teaching. To prepare the teachers for effective teaching learning process, Joyce and Weils (1972) have developed models of teaching based on different theories of teaching.

Models of teaching is a collection of interrelated parts arranged in a sequence which provides guide lines to achieve specific goals. It helps in designing instructional activities an environment, facilitating and carrying out these activities and realisation of the stipulated objectives. More over it involves a higher level of analytic element than the teaching method and higher level of synthetic elements than teaching skills.

Models are designed to achieve a particular set of objectives. It is not a substitute to any teaching skill, rather it creates the conducive teaching-learning environment by making the teaching, get more systematic and efficient.

A teaching model is necessarily characterised by the frame of reference and focus that it provides to the teacher to act purposefully and rationally.. According to Joyce and Weils (1972) "it is a pattern or plan which can be used to shape a curriculum or course to select instructional materials and to guide teachers action" all leading to attain certain specific goals. A model can therefore be considered as a 'Blue Print' for teaching.

Chauhan (1979) defines a model as 'an instructional design which describes the process specifying and producing particular environmental situation which causes the students to interact in such a way that a specific change occurs in their behaviour.'

Models of teaching emerged out of the search by Joyce and Weil (1972) to find a variety of approaches or strategies of teaching to match the various learning styles. Attempts have been made by researchers to match the different approaches, strategies, styles of teaching with the objectives of instruction and pupils learning styles.

Dunn and Dunn (1979) Fischer and Fischer (1979) Elis (1979) Joyce and Weil (1980) also believes that the strength of education resides in the intelligent use of this powerful variety of approaches matching them to different goals and adopting them to the students styles and characteristics.

Models of teaching can be used to design face to face teaching in classroom or tutorial settings to shape. Instructional materials including books, films, tapes, computer, mediated programmes can be utilised for the study (Joyce, Weils and Showers, 1992).

There are many powerful models of teaching designed to bring about particular kind of learning and to help students to become more effective learners. How teaching is conducted has a large impact in students activity of education themselves.

ASSUMPTIONS REGARDING MODELS OF TEACHING

Models of teaching are based on certain assumptions. The assumptions which have been given by Joyce and Weil (1980) are as follows:

1. There is a considerable array of alternative approaches to teaching. Many of these are practical and can be implemented in schools and classrooms where the students and teacher have both skill and will.

2. Methods make a difference in what is learned as well as how it is learned. Implicitly approaches to teaching are sufficiently different from one another, that they change the probability that various kinds of outcomes will result as each different one is used.

3. Students are a powerful part of the learning environment, and students read differently to any given different teaching method. Combinations of personality, aptitudes, interpersonal skills, and previous achievement, contribute to configurations of learning styles so that no two people react in exactly the same way to any one model of teaching.

FUNCTIONS OF MODELS OF TEACHING

The models of teaching have three major functions in the teaching-learning or instructional process. These are (a) designing of curriculum or courses of study, (b) development and selection of instructional materials and (c) guiding the teachers activities in the teaching learning situations. The functions of model of teaching can be explained with the help of the following diagram.

Figure 1

FUNCTIONS OF MODELS OF TEACHING

DESIGNING
CURRICULUM OF
COURSES OF STUDY

MODELS
OF
TEACHING

GUIDING TEACHER'S
ACTIVITIES

DEVELOPMENT AND
SELECTION OF
INSTRUCTIONAL MATERIAL
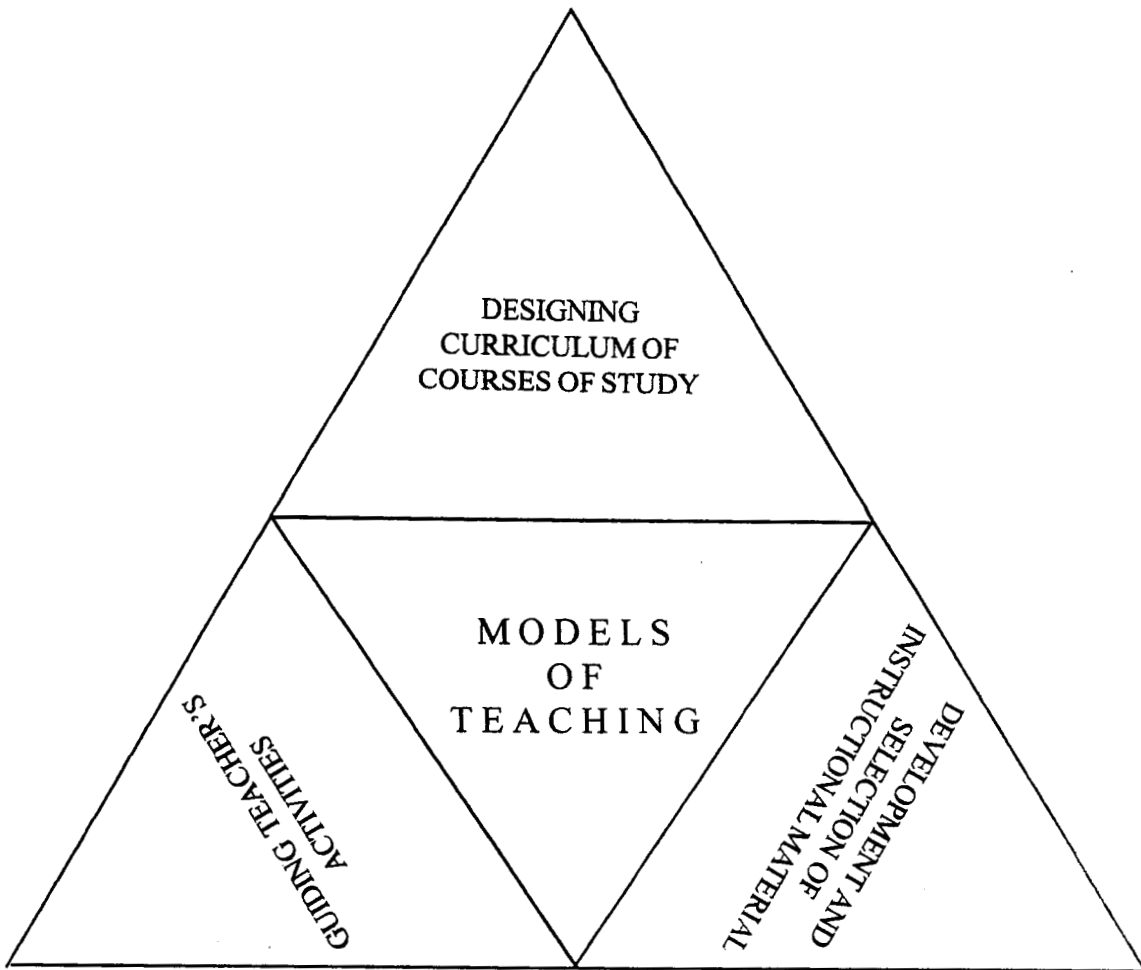
FAMILIES OF MODELS OF TEACHING

During the last two decades various researchers have been developed a number of models of teaching. Among them the wide accepted and monumental work is that of Joyce and Weil (1980). They organised the alternative models of teaching they have discovered into four families that share orientation towards human being and how they learn. These are the social family, the information processing family, the personal family and the behavioural systems family. They stress that the different instructional goals would be realised by putting these models of teaching into action.

The Social Family of Models of Teaching

The models of social family are concerned with the social relationships of the individual with others in the society. These models aim at the development of social relationships, democratic processes and work productivity in the society. This is not to say however that these models restrict themselves to the development of social relationship. They are also concerned with the development of mind and the learning of academic subjects. The table below indicates the developers and redevelopers of social models.

Table 2.1

Details of developers and redevelopers of social family

Models	Developers/Redevelopers
Partners in learning Positive interdependence	David Johnson Roger Johnson Margarta Calderon Elizebath Cohen
Structured Inquiry	Robert Savin (Aronson)
Group investigation	John Dewey Herbert Thelau Shlomo Sharaan (Bruce Joyce)
Role Playing	Fanure Shaftel
Jurisprudential Inquiry	Donald Oliver James Shaver

The Information Processing Family of Models of Teaching

The models of this family is concerned with acquiring and organizing data, presenting verbal and non verbal symbols, sensing problem and finding solutions to

them, developing concepts and language for conveying them, hypothesis testing and creative thinking. Most of them are useful for studying self and society. Thus achieving the personal and social goals of education.

The table below displays the developers and redevelopers of these models

Table 2.2

Details of developers and redevelopers of information processing family

Models	Developers/Redevelopers
Inductive thinking (Classification oriented)	Hilda Taba (Bruce Joyce)
Concept Attainment	Jerome Bruner (Fred Lighthall) (Tennyson) Cocchirella (Bruce Joyce)
Mnemonics (Memory assists)	Michael Pressley Joel Levin Richard Anderson
Advance organizers	David Ausubel (Lawten and Wanska)
Scientific Inquiry	Joseph Schwab
Inquiry Training	Richard Suchman (Howard Jones)
Synetics	Bill Gordon

The Personal Family of Model of Teaching

The personal family of models begin from the perspective of the selfhood of the individual. They are intended to develop the unique personality of the learner. Personal model give much importance to the individual perspective and encourages the productive interdependence in order to increase the self awareness and responsibilities for their own future. The table below shows the developers and redevelopers of personal family.

Table 2.3

Details of developers and redevelopers of personal family.

Models	Developers/Redevelopers
Non directive teaching	Carl Rogers
Enhancing Self Esteem	Abraham Maslow (Bruce Joyce)

The Behavioural Systems Family of Models of Teaching

Behavioural models have evolved from attempts to develop efficient systems for sequencing learning tasks and shaping behaviour by manipulating stimulus, response and reinforcement. The common characteristics of these models are that they breakdown the learning task into a series of small sequence of behaviour. Each

behaviour is so designed that success is ensured; the learner actively responds to the situation, to the problematic situation and gets reinforcement and feed back.

The developers and redevelopers of behavioural family are as shown in table.2.4.

Table 2.4

Details of developers and redevelopers of behavioural family

Models	Developers/Redevelopers
Mastery Learning	Benjamin S.Bloom James Block
Direct Instruction	Tom Good Jere Brophy Carl Gerister Ziggy Engleman Wes Becker
Simulation	Carl Smith Mercy Smith
Social Learning	Albert Bandura Carl Thoresen West Becker
Programmed Schedule	B.F. Skinner

The above referred models of teaching under different families aim at the development of different aspects of human personality that the personal, informational, social and behavioural. Since education is meant for all round development of child's personality, no simple model can be selected for one's development. Some situation would require an application of a combination of models. All of them will have to be employed according to the requirements of the situation.

BASIC COMPONENTS OF MODELS OF TEACHING

The models of teaching consists of the following components:

(i) Syntax

It is described in terms of sequences of activities which are called phases. Each model has a distinct flow of phases

(ii) Social System

The social system provides a description of the students and teachers roles and relationships and the norms that are encouraged. The role of the teacher may be a reflector, facilitator of a group, counsellor, or a task master. It greatly depends upon the model selected.

(iii) Principles of Reaction

Principles of reaction explain the procedure in which the teacher deals with the reactions of the students. It guides the teacher to select an appropriate response to what the student does.

(iv) Support System

Support system refers to additional requirements beyond the usual capacities, and technical facilities necessary to implement a model.

(v) Instructional and Nurturant Effect

It describes the direct and implicit results of instructions. The nurturant effects come from experiencing the environment created by the model.

(vi) Application

It deals with the further applicability of the model for different curriculum and classes in future.

Since the present study is concerned with two models (belonging to different families) namely 'Mastery Learning Model' belonging to behavioural systems family, and 'Advance Organiser Model' belonging to information processing family, it would be useful to critically examine the models.

MASTERY LERNING MODEL

The extract of Mastery Learning is the strong philosophical principles regarding teaching and learning. It works on the fundamental idea that all most all the students can learn what we have to teach them. This concept is seen emphasised by various educators such as Comenius in the 17th century, Pestalozzi in the 18th century, Herbert in the 19th century and Washburane and Morrison in the 20th century ie. In 1922 and 1926 respectively.

Even though there are many versions of Mastery Learning all of them stresses the possibility of high level of achievement by the learners. For this there should be a sensitive and systematic approach of instruction. Another important factor related to mastery learning is that the learners are to be provided with sufficient time to achieve mastery and there should have a specific idea of criteria for mastery.

Mastery learning was developed initially from the work of Caroll supported by the ideas of Washburane Morrison Skinner Bruner, etc.

Theoretical base of Mastery Learning

Now a days there exist a great concern over the improvement of effectiveness of schools. There is a quest for an instructional system which would simultaneously widen the access and ensure relevant quality of education.. The policy makers are on the path of reducing the gap between the existing and desired quality of school learning. Mastery learning is one approach for improving the quality of school learning. It emphasizes mastery by each student in each of the content. Further it suggest procedures where by instructional learning can be so managed within the context of ordinary group based classroom instruction as to promote his fullest development. Mastery learning enables seventy five percentage to ninety percentage of the pupils to achieve the same high level as the top twenty five percentage. Learning under typical group based instructional methods. It also makes student learning more

efficient than the traditional method. It assures great interest of students and creates a better attitude towards the subject.

The Privot of Mastery Learning is the feed back and corrective procedures of various stages or parts of the learning process. Formative tests and diagnostic tests proved to be most useful. Such tests were intended to determine what each pupil had learned in a particular unit and what ever the pupil need to learn. However the key to the success of Mastery Learning largely lies on the motivation of pupils and the corrective procedures in their learning difficulties at the appropriate time in the learning process.

Contributions of Washburane and Morrison

The Concept of Mastery Learning can be traced in the 1920s itself. Carleton Washburane (1922) and Henry C. Morrison (1926) leaded their teams at the university of Chicago towards developing the Mastery Learning Programme. Carleton Washburane (1922) and his associates developed Winnetka plan and Prof. Hentry C.Morrison also developed a method for attaining mastery. They defined mastery in terms of particular educational objectives. The objectives were cognitive for Washburane and Cognitive, affective and psychomotor for Morrison. Both the approaches shared some common features. Instructions were organised into learning units each unit consisted of systematically arranged learning material to teach desired unit to objectives.

Complete mastery of each unit was ensured before proceeding to the next. It was important in Winnetka plan because the units tended to be sequenced so that the learning of each unit is built upon prior learning.

An ungraded diagnostic test was administered at the completion of each unit to provide feed back on the adequacy of the students learning.

On the basis of the diagnostic tests original instruction given was supplemented with appropriate corrective measures such as to complete learning.

In Morrison approach a variety of correctives were used. In the Winnetka plan, primary self instructional practise materials were used. Under Morrison Method each student was allowed the learning time the teacher required to bring all or almost all students to mastery.

Due to the lack of suitable technology for implementary the strategy the ideas disappeared after 1930.

Programmed Instruction & Mastery Learning

The ideas of Mastery Learning reappeared in late fifties and early sixties as corollary of programmed instruction. The fundamental ideas of programmed instruction was that the learning of any behaviour, how complex it may be rested upon the learning of sequence of less complex component behaviour (Skinner 1954). It would be possible for any student to master even the most complex skills through

breaking down a complex behaviour into a chain of component behaviours and ensuring the linkage in the chain.

Block's (1970) work proved that programmed instruction worked very well for some students but it was not effective to almost all students. It provided a valuable tool to help some students to attain mastery but it did not provide a useful Mastery Learning Model.

Today Mastery Learning Model seems to go beyond the steps suggested by Washburane (1922) Morrison (1926) and Skinner (1954). It refers to the Carroll's (1963) model of conceptual pardiam. He could specifically mark the major components contributes the student achievement in schools. And also indicated the inter action of the factors concerned. Carroll's work was on foreign language learning.

Assumptions of Carroll's Model

The following are the Assumptions of Carroll Model of school learning

1. Carroll's assumption is that the work of school can be broken down to a series of discrete tasks.

2. Model applies to only one learning task at a time but it should be possible to describe a student's success in learning a series of tasks by summarising the result of applying the model to each component task.

3. It is not intended (to be applied) to goals of school that have to do with attitudes and depositions (Social and emotional goals of schooling) . While Carroll acknowledges that learning tasks may play a role in support of attitude development. The acquisition of attitudes is postulated to follow a direct paradigm from that involved in learning task.

4. According to Carroll the model should not be confused with what is ordinarily called learning theory. His model is intended a description of the Economics of the school learning process rather than an exact scientific analysis of the essential conditions for and process of learning itself.

Description of Carroll's Model

Carroll's Model contains five elements.

1. **Aptitude:** Carroll remarks aptitude as the amount of time needed to learn the task under optional instructional conditions.

2. **Ability to understand:** The ability to under stand instruction is related to one's general intelligence and verbal ability.

3. **Perseverance:** It is the amount of time the learner is willing to engage actively in learning.

4. **Opportunity:** It is the time allowed for learning.

5. Quality of Instruction: It is judged by the degree to which it is optional for every pupil. Prior to Carroll the aptitude was defined in terms of the level of performance. The practice of measuring a student as a good learner or a poor learner with the level of attainment in a given amount of time was not agreeable to Carroll. He was of the view that aptitude is an index of amount of time required by a child to learn the subject to a given level and he also suggested that it could be viewed as a measure of learning rate. From the pupils could be devided as fast or slow learners rather than good or poor learners.

If a student was allowed the time needed to learn and he actually spent the required learning time then he could be expected to attain the level. On the other hand if sufficient time was not allowed, or if the child did not spend the time required then the degree to which he/she would learn could be expressed as.

$$\text{Degree of School Learning} = f \ \frac{\text{Time spent}}{\text{Time needed}}$$

Carroll defined the variables that directly influence learning of school children in terms of time. According to him the time spent and time needed were influenced by the characteristic of learner and the instruction.

The Carroll model envisaged the school learning as a series of distinct learning tasks and in each task the students proceeded from simple to complex.

Carroll defines the job of psychologists as "to develop and apply knowledge about only pupils succeed or fail in their school learning and to assist in the prevention and remediation of learning difficulties". He concentrated on learning instead of teaching. Carroll's model suggest a research question, provide solution of practical educational problems, help to re-connect the often conflicting results of different research studies. Because of the changes in the field of education the issues in the field also changed from Carroll's period. It is a fact that the researchers and educational thinkers used Carroll's model on a starting point of theories of school learning. In the present study the investigator has taken Carroll's model modified by Bloom as basis for Mastery Learning Model.

Contributions of Bloom

Benjamin. S. Bloom (1968) transferred the Carroll's conceptual model of school learning into working model for classroom instruction. He provided theoretical and practical basis for Carroll's model. Further Bloom termed the instructional system as Mastery Learning which is associated with increased student achievement. He also suggested that 'cues – participation reinforcement" are essential components of quality instructional system with a feed back and corrective procedures being used liberally to ensure that each student receives optimal instruction.

Bloom primarily observed the teaching learning process carried out in a class room setting. The teacher learning strategy that include feed back and corrective

procedure, was labeled as Learning Mastery (Bloom 68) and later shortened simply Mastery Learning.

By extending Carroll's principles Bloom claimed that if all students are provided with the samee opportunity to learn and the same quality of instruction, it is likely to be appropriate and sufficient for some students but not for others. So if the learning situation could be structured to provide more appropriate opportunities to learn and a more appropriate quality of instruction for each student, then a majority of students perhaps as many as ninety five percentage could be expected to learn very well and attain mastery.

This was designed for the class room where the time allowed for learning is relatively fixed and mastery was defined in terms of specific set of major objectives which the student was expected to exhibit by a subject completion.

It is the teaching rather than the students who determines the pacing of instruction.

Blooms transformation of Carroll's model is with the following characteristics.

1. Mastery of any subject is defined in terms of sets of major objectives that represent the purposes of the course or unit.

2. The substance is then deviled into a larger set of relatively small learning units, each one accompanied by its on objectives, which are parts of the larger ones or thoughtful essential to their mastery.

3.   Learning materials are then identified and the instructional strategy selected.

4.   Each unit is accompanied by brief diagnostic test that measure the students developing progress (The formative evaluation) and identify the particular problems each student is having. Knowledge of progress is feed back to the students to act as reinforcement (praising and encouragement can, if contiguous with correct performance, serve as reinforcement also)

5.   Data obtained from administering the tests and used to provide supplementary instruction to the student to help over come problems. (Bloom 1971).

Post Bloom Period

The period after 1971 which was in turn dominated with the writings of Bloom's students and colleges was known as post Bloom period i.e., the period 1971 onwards.

When Bloom was concentrated in developing the theory to Mastery Learning his students and colleges concentrated in practice. Some of them applied the theory to improve the class room climate and thus the school climate. The systematic effective applicator of Mastery Learning requires the efforts of large number of individuals at different stages. It is interesting to note that a net work mastery learning practioners known us Network of out come based school, affiliated to the Aneria was forced in united states. Since the mid 1970 Mastery Learning has been applied to various subjects areas and it is seen extended beyond the secondary level.

Uses of Carroll's Variables in Bloom's Model

1. Aptitude for particular kind of learning: Bloom believed that aptitude for a particular teaching task is not at all stable and they can be modified by appropriate environmental conditions in home or in school. According to him the important duty of the educational practitioners is to bring about positive changes in the basic aptitudes. In short the main aim of Mastery Learning is to help the students learn a subject to mastery respective of the changes in this aptitude.

2. Quality of instruction: Bloom suggested that if every student had a well trained tutor then most of them would be able to master a particular subject. The main point to be stressed is that the quality of instruction must be developed with respect to the needs and characteristics of individual learners rather than group learners.

3. Ability to understand Instruction : This is defined as the ability of the learning to understand the nature of the task he has to learn and the procedures he has to follow in its learning. There are different instructional strategies, which can be used by teachers. Examples are small group study session, tutorial help, alternative textbook, explanations, workbook and programmed Instruction, audiovisual methods and academic games. With regard to instructional materials Bloom pointed out that instead of particular materials for particular students through out the course, each material may serve as a means of helping the individual student at selected points in the learning process and that each student may use what ever variety of materials he

finds useful as he faces difficulties in his learning. The instructional goal should be to help the students over specific learning difficulties and also to enable them to become more independent in his learning. The student should be able to find out the alternative way to comprehend new ideas. In short learning is the most important and the alternatives enable all or almost all to learn the subject matter.

Basic Principles for the Attainment of Mastery

1. The learner has to understand the total course and the procedure he has to follow in learning.

2. The course or subject content is broken into a sequence of smaller learning units.

3. Formulation of specific instructional objectives for each units.

4. Students are assessed before the unit begins to determine their starting point (Pre-assessment).

5. Core of instruction is designed systematically to help the student to proceed from initial status to mastery of the objectives.

6. Diagnostic or formative assessment is carried out during the instructional programme to provide feedback prescription, remediation, relocation and enrichment assignment.

7. Allocation of sufficient time opportunity to learn and alternative learning strategy etc. to be adopted for attainment of mastery and steps in mastery learning.

All the tasks involved in the Mastery Learning can be accomplished by the following steps.

1. Planning for Mastery   2. Teaching for Mastery

1. Planning for Mastery

Planning for Mastery can be accomplished in the following sub steps: such as

(1) statement of objectives (2) development of pre-test to measure mastery level of pre requisite skills. (3) identification of component skills.(4) setting standards for mastery (5) development of summative test.(6) arranging the learning materials into smaller correlated and sequential units to facilitate mastery in less time (7) Development of lesson plan to each sub unit. (8) Fix the time required to master each sub unit. (9) Development of formative tests (10) Development of enrichment activities for the masters and correctives for non masters.

2. Teaching for Mastery

The executive of Mastery include the following steps.

1. Orientation of students

2. Teaching of learning units.

3. Allowance of adequate time to practice each unit.

4. Formative testing.

5. Diagnostic testing over the unit.

6. Allowing non-masters to work with correctives and providing masters enrichment activities.

7. Administration of summative test.

Mastery Learning and Education

The role of curriculum, Instruction an Evaluation in Mastery Learning are described below.

Curriculum

Mastery Learning does not focus on content but on the process of mastering it. This type of learning works best with the traditional content secured curriculum based on well detained learning objectives organized into smaller sequentially organized units.

Instruction

Mastery Learning captures many of the elements of successful tutoring and the independent functionality seen in high end students. In a mastery learning environment the teacher directs a variety of group based instructional techniques. The teacher also provides frequent and specific feed back by using diagnostic tests, formative tests as well as regularly correcting the mistakes that students make along their learning path.

Evaluation

An effective Mastery Learning Strategy requires two types of evaluation (1) Formative evaluation (2) Summative evaluation. Formative evaluation provides data

about how students are changing while, summative evaluation provides the data about the change that has already occurred.

According to Scriven (1967) there are no basic logical and mythological difference between formative and summative evaluation only timing and the way its results are used can indicate whether a test is formative or summative.

Formative Evaluation

Airasian (1971) remarks that formative evaluation seeks to identify learning weaknesses prior to the completion of instruction on a course segment unit, a chapter or a lesson. Formative evaluation provides the necessary information to, individualise instruction with in Mastery Strategy. It suggests in what ways his original instruction must be supplemented, if he has to complete his learning before proceeding to next unit.

Summative Evaluation

The main purpose of Summative Evaluation in Mastery Learning is to grade the students according to their achievement. The other purposes are certification of skilled abilities, prediction of success and failure, comparison etc.

ADVANCE ORGANISER MODEL

The school is considered as the sole agency in providing majority of the knowledge to the students. The learning that takes place in classrooms have a vital role

in the life of educands. Effectiveness of the classroom depends upon the creativity and efficiency of the teachers. For this the classroom teacher should be well equipped with modern teaching methods to transmit variety of knowledge and information to the students. This could easily be attained through a careful organisation and presentation of the subject matter.

In the words of Joyce and Weil (1968) "the learners have to be able to understand where the learning is headed and what are the relationships between its components."

The very old and popular method of instruction is the Lecture Method. But common observations points out that the Lecture Method is not very effective in terms of understanding and liking of the students. Efforts are made to improve the effectiveness of Lecture Method. David P. Ausubel, an educational psychologist made an attempt in this regard. Thus he propounded the theory of verbal learning. He doesn't create a unique cognitive theory but generally accepted those of several other theorists especially Jean Piaget. Based on this, the Advance Organizer Model was developed. The Ausubelian model which has a close resemblance with the Lecture method, promotes better learning.

Theory of Meaningful Verbal Learning

Ausubel's theory of Meaningful verbal learning deals with three concerns, ie., three aspects of teaching learning process. They are:

1. How knowledge (curriculum content) is organized

2. How the mind works to process new information(learning)

3. How teachers can apply these ideas about curriculum and learning when they present new material to students (instruction).

Ausubel (1963) says that there is a parallel relationship between the way the subject matter is organized and the way the people organize them in their minds (cognitive structure). The Advance Organizer Model is designed to strengthen the cognitive structures. Cognitive structure means a persons knowledge of a particular subject at any given time and how well organized clear and stable that knowledge is. According to Ausubel a person existing cognitive structure is of utmost importance because it decides whether the new material will be meaningful and how well it can be acquired and retained. So before providing new material the intellectual scaffoldings, ie. The strengthening of the cognitive structure should be done. It facilitates student's acquisition and retention of new information One important thing is that the new material should not conflict with the existing cognitive structure. So it is the duty of a teacher to organize the knowledge in a sequence and present it in such a way that the ideational anchors are provided. In addition the learners must actively reflect on the new material thinking through the linkages, reconciling differences and discrepancies with existing information and noting similarities.

The two principles suggested to make the concepts a stable part of the student's cognitive structure are progressive differentiation and integrative reconciliation.

Progressive differentiation means most general ideas of the discipline are presented first and are progressively differentiated in terms of detail and specificity. Integrative reconciliation simply means that new ideas should be consciously reconciled and integrated with previously learned content.

Definitions of Advance Organiser

According to Ausubel (1978) Advance Organizer is an introductory material at a higher level of abstraction, generality and inclusiveness than the learning material presented before the actual learning task. Its purpose is to explain integrate and interrelate the material in the learning task with previously learned material. And also to help the learner discriminate the new material from the previously learned material.

Eggen, et al. (1979) said that an Advance Organizer Model is a statement preceding the lesson that is designed to help the learner store and retrieve material which is learned. Further an Advance Organizer statement is designed to introduce the material which follows and is broad enough to encompass this information.

In the above definitions it can be concluded that Advance Organizer Model is given before the presentation of the actual learning task and it helps in organizing the relationships between previous and new knowledge.

Characteristics of Advance Organiser Model

Mayer (1978) pointed out the five characteristics of the Advance Organizers as follows:

1. Short set of verbal visual information.

2. Presented prior to learning a larger body of to be learnt information.

3. Containing no specific content from the to be learnt information.

4. Providing means of generating logical relationships among elements in the to be learnt information.

5. Influencing the learner's encoding process.

Ausubel (1977) Bruner and Clawson (1975), Hartley and Davies (1976) and Mayer(1978) believes that an advance organizer provides an over view of the more detailed information to follow. The Advance organiser can influence the learning set by increasing student motivation and encourage the use of active encoding strategies on the part of the learner.

Types of Advance Organiser Model

There are two types of Advance Organisers: Expository Organisers and Comparative Organisers.

Expository Organisers

They are used when the new learning material is completely unfamiliar. These types are especially helpful because they provide ideational scaffolding for unfamiliar material. They attempts merely to provide inclusive subsumers that are both related to existing ideas in cognitive structure and to the more detailed material in the learning passage.

Comparative Organisers

They are used when the learning material is relatively familiar. They are designed to integrate new concepts with basically similar concepts existing in the cognitive structure. They are also designed to discriminate between the old and new concepts in order to prevent confusion caused by their similarity.

Description of the Model

The Advance organiser model of teaching is described into different steps which are as follows:

Syntax

The advance organiser model of teaching consist of three phases:

Phase 1

Presentation of Advance Organiser. During this phase first of all the objectives are explained and clarified and after which the advance organiser is presented.

Phase II

Second phase include the presentation of the learning task or material. This may be through lectures, experiments, films, scripts, discussions, experiences, extra reading materials, etc. The learning is organized in a logical order Attempts are made to maintain attention, motivation and interest.

Phase III

Third phase is the strengthening of the cognitive organization. The purpose of this phase is to anchor the new learning material in the students existing cognitive structure. The integrative reconciliation is brought about by asking to prepare the summary of the material learned, to repeat definitions to differentiate the closely related subject.

Syntax of Advance Organiser Model is presented in the Table below.

Table 2.5

Details of Syntax of Advance Organiser Model

Phase I
Presentation of the Advance Organiser
Clarify aims of the lesson
Present organiser
Identify defining attributes
Give examples
Provide context
Repeat
Prompt awareness of learner's relevant knowledge and experience
Phase II
Presentation of Learning Task or Material
Present the material
Maintain attention
Make organization explicit
Make logical order of learning
Material explicit
Phase III
Strengthening of Cognitive Organisation
Use principles of integrative reconciliation
Promote active reception learning
Elicit critical approach to subject mater
Clarify

Social System

In this model, the teacher retains control of the intellectual structure as it is necessary continually link the learning material to the organizers and to help students differentiate new material from previously learnt material. In phase three however the learning situation is ideally much more interactive with students initiating many questions and comments. If only the learner initiates to integrate the new material with that of the prior knowledge the successful acquisition will be possible.

Principles of Reaction

The teachers solicited or unsolicited responses to the learner's reactions are to be guided for the purpose of clarifying the meaning of the new learning material differentiating it from and reconciling it with existing knowledge, making it personally relevant to the student, and helping to promote a critical approach to knowledge.

Support System

Well organized material is the critical support requirement of this model. The effectiveness of the Advance Organiser depends on an integral and appropriate relationship between the conceptual organiser and the content.

Application

1. The Advance Organiser Model is specially useful to structure extended curriculum sequences or courses and to instruct students systematically in the key ideas of a field.

2. It increases the learner's grasp of factual information linked to and explained by the key ideas.

3. The model can also be shaped to teach the skills of effective reception learning.

4. Whenever ideas of information needs to be presented renewed or clarified the advance organiser is a useful model.

5. Other models can be utilised as a means of evaluating or applying the material presented by the Advance Organiser.

6. The activities designed to strengthen cognitive organisation can be spontaneously applied to the clarification of ideas in all instructional contexts.

Instructional and Nurturant Effects of the Advance Organiser Model

Instructional Effects

The Advance Organiser Model was developed for getting conceptual structures in classrooms and also for the meaningful assimilation of information and ideas. Advance organiser model helps in linking the new information with the cognitive structure of the person. Thus instead of rote learning active reception learning takes place. When the concepts are clear and understanding improves, the learning will get strengthened. This leads to the meaningful assimilation of information and ideas.

Nurturant Effects

There are also the nurturant effects of the Advance Organiser Model. Through the Advance Organiser Model students starts the learning technique of abstracting

learning material and presenting it in precise words. This develops the habits of precise thinking. As a result of the meaningful assimilation and strengthening of the understanding they develop an interest in inquiry.

The Instructional and Nurturant Effects are diagrammatically represented below:

Figure 2

INSTRUCTIONAL AND NURTURANT EFFECTS OF ADVNCE ORGANISER MODEL
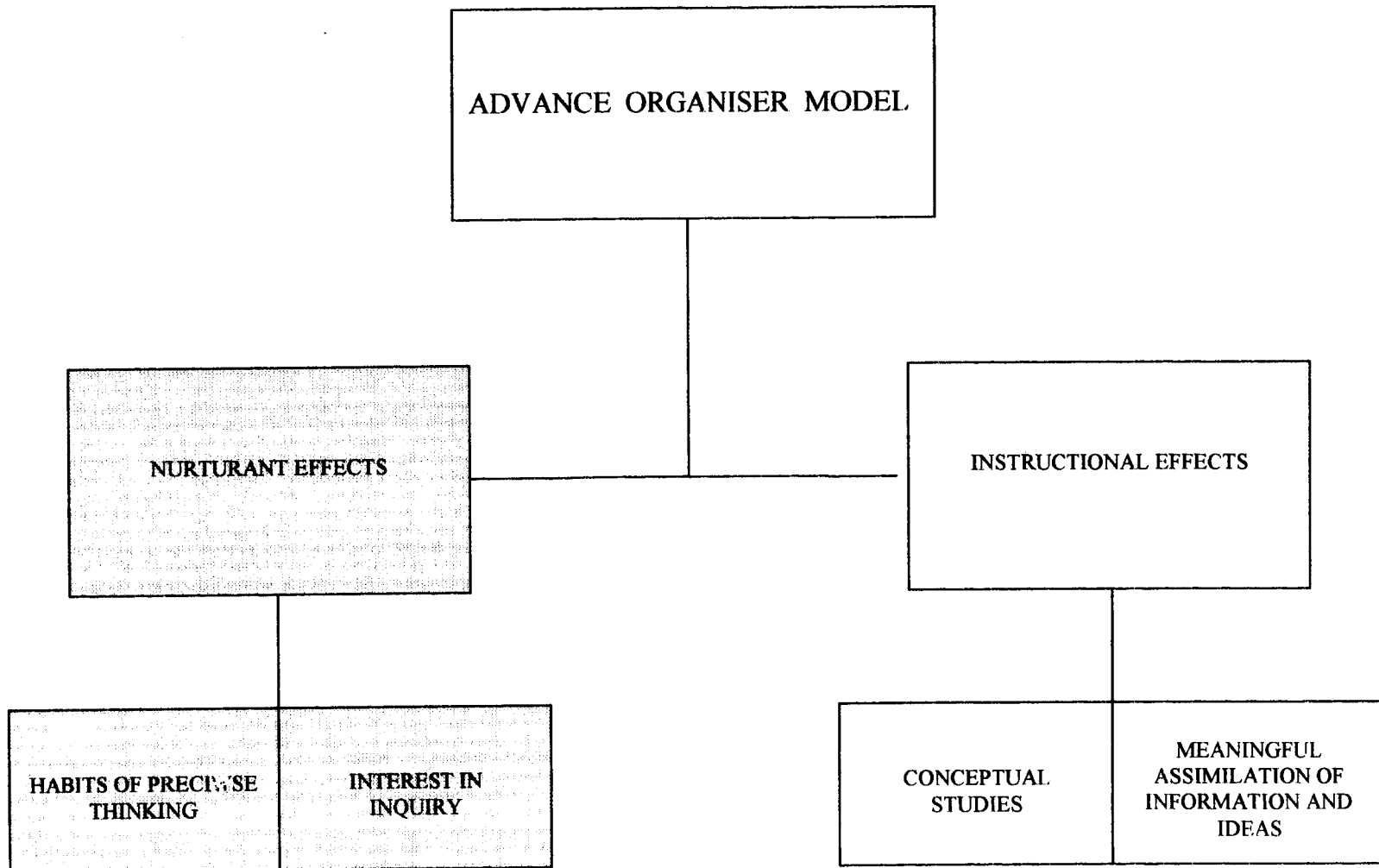
Educational Implications of Advance Organiser Model

It is well established that the Advance Organizer Strengthens cognitive structure of pupils and enhances retention of learned material. Advance Organizer as its name pointer it is the introductory material. So it should ensure a higher level of absorption and capable of relating the newly learned ideas. A fully understood Advance Organizer can contribute much more to organise subsequent learning. It should be closely tied to the matter it proceeds. It is found by researchers that Advance Organiser is helpful in developing thinking ability and intellectual structure. The important finding is that the presentation with an organising structure helps more learning.

Implications for Curriculum

The theory of Advance Organizer Model has got direct implications over curriculum and instructions. In Advance Organizer Model of teaching, Ausubel uses two principles progressive differentiation and integrated reconciliation. The first means that the general idea should be presented first then only the details and specific facts. Integrative reconciliation means that new ideas should be related to the previously learned. It clears that if we follow progressive differentiation we will be following integrative reconciliation also. With this the learner can be made disciplined. These principle should carefully be adopted while preparing text book and planning the curriculum.

Role of the Teacher in Advance Organiser Model

In Advance Organizer Model of teaching, the teacher holds the control of the intellectual structure because it needs relating the learning material to the organisers and help pupils to differentiate the newly learned material from the previously learnt material. The third phase namely the strengthening of the cognitive organisation provides sample way for the active participation of the learner. Then the teacher has to play a major role.

The teacher should take adequate care while formulating and selecting the Advance Organizer for Teaching. It is regarded as the hurdle in front of the teachers in using the Advance Organiser.

The teacher should make a through study of the subject matter to be conveyed and conceptualize the knowledge structure in the hierarchical order.

It is of utmost importance that the presentation of the Organizer should be planned properly as a separate teaching episode. Otherwise the role of the Advance Organizer will be minimized to normal instruction.

Applications of Advance Organiser

Advance Organizer Model is effective for systematic instruction in classrooms. This increases the learners grasping power and helps to impart effective information. It is designed to teach skills. Any subject could be taught through this model. This

means that it can be used to teach languages, Science, Maths etc. This model is used for presenting, renewing and clarifying. Activities connected with strengthening of cognitive structure leads to clarification of ideas. The most difficult part of the model is the development of the Advance Organiser. A scientifically formulated Advance Organizer only can survive the purpose. The difficulty in developing organisers are the pulling strings of teachers in using this model.

PART II
EMPIRICAL STUDIES

Mastery Learning : Studies Abroad

Keller (1968) made use of an inexpensive and effective Mastery Learning Strategy to teach General Psychology to a sample of 200 pupils. He found that 65% to 75% of the students received A or B. Each time when strategy was applied it produced a large percentage of A and B but very few failures.

Kim, Hogwon, et al. (1969) studied the effectiveness of Bloom's strategy for Mastery Learning for the teaching of Geometry. The sample consisted of 272 VII graders of which half were assigned to the Mastery Learning Group and the other half to the non Mastery group comparable in terms of IQ. The results indicate that 74% of the experimental group compared to only 40% of the control groups attained the Mastery criterion of at least 80%. The findings suggest that the powerful effect of feed back correlation procedures can on each students learning when used to supplement

their original instruction under such difficult instructions conditions as 70% of students to one teacher.

Block (1970) studied the effect of various levels of performance on selected cognitive affective and time variables. The purpose was two fold (I) a rationale for setting objectives criterion referred performance standards for sequential learning tasks was proposed applied and validated (ii) the cognitive and affective consequences of acquiring students to maintain particular mastery level through the learning of sequential tasks were examined. The experimental control group design was used. A sample of 91 students were selected from VIII grade. The sample was randomly assigned to 5 groups. The unit performance was measured by formative tests administered at each units completion.

The major findings were:

1. Maintenance of 95% mastery level produced maximal cognitive learning but had long run negative effects in student interests and attitudes.

2. Maintenance of 85% mastery level produced maximal interest and attitude but slightly lesser than optional cognitive learning.

3. Mastery learning makes student's increasing efficient.

Collins (1970) investigated the effectiveness of different variables in Bloom's Mastery Learning Strategy for teaching modern mathematics on a sample of 150 VIII graders from six classes. The study revealed that 80% of students under Mastery

Learning Conditions attained mastery compared to only 40% under control conditions. The findings suggested that great importance of specifying through our instructional and testing procedures the objectives that the students are expected to master.

Kim et al. (1970) examined the effect of mastery learning in Korean middle schools with a large sample of 5800 VII graders. The study revealed that on the average 72% of the students reached the Mastery Criterion by learning English under experimental conditions compared to only 48% learning under ordinary instructional conditions compared to only 48% learning under ordinary instructional conditions. In Chemistry an average of 39% of Mathematics compared to 61% of Non Mastery students attained the mastery criterion.

Merrill (1970) examined the effectiveness of a procedure to facilitate student learning of a hierarchical learning task on a sample of 40 students of special interest for mastery learning. The findings indicate that specific review following difficulties made experimental students learning increasingly efficient. Merrils findings suggest that Mastery Learning at each stage in the students learning can be maintained through specific correlation/review procedures without using any more and perhaps even less instructional time than would ordinarily be spent.

Wentling (1973) conducted a study which compared the effects of a mastery learning strength with those of non-mastery strategy of instruction employing various levels of feed back from unit achievement test. A sample of 116 General Automobile

Mechanic Course students in a high school was selected. They were distributed among 6 classes and taught by 3 teachers. A 3x2x2 factorial design was used. Of the six classes three classes were assigned to mastery group and other 3 non mastery groups. Immediate achievement was measured and the day following the completion of the instruction. The same instrument was administered 3 weeks later to measure retention. The mastery group exhibited superior mean achievement scores in both immediate achievement test and retention test.

Chan and Cole (1979) conducted an investigation to compare the effects of Mastery and Non-Mastery Strategies on reading comprehension. The subjects were 120 grade III children. Results indicated a significant Cognitive Entry Behaviour (CEB) traditional and showed that the low CEB students benefited relatively more than the high CEB students in the Mastery Learning Programme.

Noordin (1980) conducted a study about the greater details for the role that corrective instruction plans in the over all effectiveness of Mastery Learning showed that the students in feed back and corrective group out performed the students in the other groups.

Hallada (1982) conducted a study which examined two major areas (i) the identification of those students usually considered under prepared for university level Chemistry, (ii) The development and implementation of a mastery principle based instrumental design in general college Chemistry for these students.

A treatment group of 50 students was selected. Another comparison group of 300 students from a 1200 members traditional classes was also selected. An instructional design was developed for the treatment group. The design featured strategies to correct for learner difficulties while following a standard syllabus. The result indicated that mastery learning strategies were effective for students who were both low in cognitive level for Chemistry and non traditional.

Hefner (1985) studied the effect of Mastery Learning competency on facilitating students retention of achievement in language arts and Mathematics. The research study were designed to examine the effectiveness of the competency based education (ML/CBE) instructional approach in facilitating the retention of achievement in language arts and mathematics over a three year period. Data were collected from 325 students. Students were divided into experimental and control groups. For the dependent variable the retention of academic achievement, total language and total mathematics scale scores from the Comprehensive Test of Basic Skills (CTBS) were collected from all students. Data from a locally developed interior referenced test were also collected from a sample population and used as an additional measure of achievement.

Using the language arts pretest scores on the CTBS as the covariate to adjust for difference between the groups in initial mean achievement analysis of co-variance were conducted on the CTBS test data and on the CRT data to examine the effect of the experimental approach on retention of achievement in language arts. Factorial

analysis of variance which treated entry level of achievement as additional independent variable were conducted on both categories of data to examine the effect of the experimental approach on the retention of achievement in Mathematics. Further more the ML/CBE approach was compared to selected Mastery Learning Programmes via meta-analysis. The analysis of data revealed.

1) No significant difference in language arts achievement were found better the experimental and control groups on either post test or the retention test.

2) On both the CTBS and the CRT post test statistically significant differences were found favouring the except group in the achievement of mathematics while no statistically significant differences were found between the two groups on the CRT criterion retention test. Significant differences, favouring the experimental group were found on the CTBS retention test in Mathematics.

3) In the meta analysis no evidence was found to support that ML/CBE instructional approach was more effective.

Tindal (1986) assessed the effect of contrasting Mastery Learning on performance among 48 high achieving and 40 low achieving I graders use of the alternative procedures resulted in better scores for low achievers but not high achievers. The results indicate that Mastery Learning may increase the percentage of students who reach mastery of basic material. It may impede progress rates of any high achievers.

Chan and Cole (1987) conducted a study on an aptitude treatment interaction in a Mastery Learning Model for instruction with a sample of 180 grade III students. The findings were:

1. High cognitive entry behaviour students may not require mastery learning instruction for much of their learning basic skills.

2. Mastery Learning makes great demands on time and effort of both teachers and students.

3. Mastery Learning obtained mastery performance in every step of learning sequence when teaching high cognitive entry behaviour students.

Guskey and Pigott (1988) conducted an investigation to review and summarize the results of a large collection of outcome based mastery learning studies. Meta-analysis techniques were the primary mechanism used to synthesis the results of these only group based and teacher paced studies were considered. The synthesis of research found that group based application of mastery learning yielded consistently positive effects as broad range of students learning outcomes including student achievement retention of learned material involvement in learning activities and student effect. The study also revealed that the use of these strategies can result in significant improvements in a broad range of teacher variables.

Null (1990) investigated the use of learning for mastery as a teaching model to increase decoding skills and general reading achievement. A sample of 196 students

enrolled in two public schools in rural Montana was selected. The pretest post test quasi experimental design was used. Both groups reviewed initial instruction in whole group settings in curriculum objectives, teaching strategies and instructional materials. The experimental group reviewed the instructional cycle of teach-test reteach-retest. After each decoding lesson formative tests were conducted. Mastery of formative test was demonstrated by scoring 80% or better. Conventional teaching techniques were used in the control classroom. The findings of the study revealed that there was significant difference favouring the Mastery Learning group as post decoding scores and general reading achievement scores.

Maurer (1991) evaluated the effectiveness of a Mastery Learning Strategy in enhancing students cognitive achievement problem solving skills and retention based summative test and by a delayed summative test. A sample of 65 students were selected. 38 students were assigned to the control group and 27 were assigned to the experimental group. The experimental group was taught through mastery learning strategy and control group through the traditional method. Daily and weekly quizzers and recycling of the material was provided to the experimental group. Summative test and delayed summative tests were administered to both the groups. The results were analysed by the multiple regression methodology the study revealed that the experimental group had a significantly better cognitive achievement than those students that did not receive the treatment.

Weingart (1991) conducted a study to determine the effect a Mastery Learning Approach to teaching high school students. The experimental group was taught through the Mastery Learning Approach and the Control Group through a conventional method. After the completion of the courses the same test was conducted to the students of both groups and collected data. A multivariate analysis was used to analyse the data. Analysis revealed significant difference between 2 groups in the areas of how the students perceived themselves as learners and their perceptions of their own mastery of the material they were studying. The strategy have a significant impact on students sense of mastery over their class material and sense of worth in regarding their academic performance.

Abadir (1992) examined the effect of 2 Mastery Learning Strategy and the effect of lecture method on community college students achievement and attitude towards mathematics. The study was designed with pretest post components. Achievement assessment test and an attitude survey were administered to all the students who participated in the study. The analysis was done by calculating the final grade success rate for each group using chi-square for testing significant differences. The analysis suggested that the Mastery Learning Strategies have a positive educational influence on students achievement in Mathematics basic skill post test scores. The study revealed that the students achieved more academically though their number was limited compared to number of student graduates produced by the lecture method.

Uhrig (1992) conducted a qualitative study to examine the feasibility problems benefits and implication of the use of Mastery learning strategy in secondary marketing programmes implementing the mark ED model programme. Two sites were studied one in the first year of implementation and the other in the third year of implication. Interviews of students former students teachers administrators and mark ED staff were conducted along with observation and document research. Data were analysed primarily using a pattern matching technique with patterns emerging from the literature and from the pilot study compared to data from the study. The information gained from the study was detailed picture of the actual practice of the use of MLS in marketing education class rooms participating in the Mark ED model programme. The findings reveals that though there were problems associated in implementing the strategy, the Mastery Learning and the concept of Mark Ed Model programme provided opportunities for most students to achieve and mastery levels.

Bilyen (1993) conducted a comparative study of the performance of secondary school students utilizing Mastery Learning and personalised system of instruction. The study involved two IX grade classes in a quasi experimental pretest post test action research design. The two methods of instruction namely, Mastery Learning and personalised system of Instruction were the independent variables. The performance based on the final examination or post test was the dependent variable. Attitude after the instruction was the moderator variable included in the study. Statistical technique used were 't' test, chi-square test etc. The findings revealed the effectiveness of both

the strategies. The academic achievement of the students are the same in both the strategies.

Aviles (1996) studied of Mastery Learning Instruction and Non Mastery Learning Instruction in an under graduate social work class. The following independent variables namely achievement retention, student study hour spent, student attude towards course topic and student course evaluation were measured quantitative and qualitative data were collected about student performance, attitude towards instructional methods, instructor time spent and instructor reaction to instructional method. The major findings of the study were that Mastery Learning resulted in greater retention ($P<0.05$). The mastery learning group preferred mastery learning (100%) rated it positively (93%) and commented positively about mastery learning (86%). One percent of the student comments were negative

Laney et.al (1996) examined the effect of co-operative and Mastery Learning Method on Primary grade students Learning and retention of economic concepts. They used 4 instructional conditions co-operative learning, Mastery Learning co-operative, Mastery Learning and controlled Treatment, co-operative Mastery Method were found superior to other methods for primary learning and retention.

Dewayne (1998) studied the effect of a mastery learning technique on the performance of a transfer of raining task. For this the investigator evaluated the effect of using the Mastery Learning technique of self directed feed back, reinforcement and

remediation of knowledge on the performance of a work related task involving 130 Navy recruits typing a Bow line knot. The study utilized the randomized subjects post test only control group design. Successor-failure on the first trial or the number of trials to successful performance of the task (tying the Bowline knot) were the dependent measures used. The Mastery Learning intervention was conducted via a work book which provided feed back to the student on his or her knowledge attainment after instruction. Yet before the evaluation of the transfer task.

The first hypothesis that Mastery Learning would have an effect on the transfer of knowledge from the class room to a work related task was statistically significant when the outcome measure was the results of first trial. There was no statistically significant difference on the mean number of trials to successful performance of the task. The second hypothesis investigated participants affective response to both traditional and experimental methods of instruction through the use of an attitudinal instrument. Statistical significant was found on this hypothesis though in the opposite direction than predicted. A few mitigating factors appears to explain this conflicting result. None the less the findings of the study support the claim that the use of a Mastery Learning technique can have significant positive effect on the ability of participants to transfer knowledge from classroom training context to a work related task.

Aviles (1999) made a quantitative analysis of Mastery Learning Instruction Versus Non Mastery Instruction in an under graduate Social work class. A quasi

experimental group design with repeated measures was used to contrast mastery learning and non mastery learning instruction. The sample consist of 137 under graduates in 4 section of an introductory social work course. Both methods resulted in similar achievement retention instructor hours spent and changes in attitude toward course topic. All the students (100%) preferred the mastery instruction.

Marianne (1999) conducted a study on the effects of performance standards for learning and relearning on retention of story content by fast and slow learners. This study examined the relative effects of two different types of learning and relearning opportunities on retention of meaningful material by fast and slow learners. The first type (Mastery) employed a performance standard criterion that equated fast and slow learners for both learning and relearning. The second type (non-mastery) provided successive single exposures to an alternative story, but made no student performance requirement. A third group (control) received only one exposure to each story than generating forgetting curve.

A key finding is that the mastery learning opportunity led to greater retention than the non mastery one. However faster learners outperformed slower and regardless of the type of learning opportunity. This was most pronounced for the non mastery condition in which significant correlation between learning speed memory abilities and intelligence were obtained for both stories. These relationships were stronger for the more different story. Both the mastery and non mastery learning opportunities yielded significantly greater retention than a single exposure.

Aviles (2001) conducted a study of Mastery Learning Versus Non Mastery Learning Instruction in an under graduate social work policy class. In this study mastery and non mastery learning instruction were contrasted using four sections of a junior level introductory social work course in a public North eastern college. He found that all of the students preferred mastery instruction. Mastery and Non Mastery in struch -involved similar amounts of instructor time, but the mastery instructor reported increased classroom time efficiency and co-ordination between teaching and testing. He concluded that Mastery Learning should be considered a promising instructional method for social work education.

Krank and Charles (2001) Instructional Strategies of Mastery Learning and co-operative learning, with sample 104 under graduate social science students enrolled in 3 section of a required course. From 14 study he found that there is significant effects for the combined Mastery Learning and Co-operative learning further he proved that ;better achievement some obtained showing greater change in self concept and when applying combined method

Mastery Learning : Studies in India

Hooda (1982) investigated the effect of Mastery Learning Strategy on pupils achievement in Mathematics with a sample of 50 pupils of 2 sections of class VI of a Government Boys Middle School. The experimental and control groups were taken from the same school and taught by the same teacher. The study revealed the following:

1. The students taught through the Mastery Learning technique showed higher gains in mathematics than that taught by conventional method.

2. Even when statistically adjusted for initial differences in intelligence SES and pre-achievement the treatment group performed significantly better

3. The self concept attitude towards mathematics did not show a significant improvement over the period of treatment through the attitude towards mathematics of students through mastery learning showed higher gain scores.

4. Mastery Learning Strategy for teaching mathematics was more effective in increasing non-verbal and verbal creativity.

Singh (1983) conducted a study to compare the effects of programmed instruction, Bloom's Mastery Learning Strategy and Conventional Method of teaching on self concept achievement motivation and test anxiety of students after taking instruction in social studies. Jalota's general mental ability test was administered. The study revealed that programmed instruction Bloom's Mastery Learning Strategy and Conventional Method of Teaching did not sufficiently affect the self concept and test anxiety of High school students. There was an increase in the academic motivation of the students after taking instruction through programmed instruction. But there is no sufficient difference in achievement motivation of the group of students got instruction through Bloom's Mastery Learning and Conventional Method of Teaching.

Chand (1984) studied the effect of personalized system of instruction and Bloom's Mastery Learning Strategy on the Retention of High school students. The study revealed that both Personalised System of Instruction (PSI) and Bloom's Mastery Learning Strategy have equal effects on immediate and delayed retention. The findings also revealed that Bloom's Mastery Learning Strategy is practicable even in schools which cannot afford to spend some extra finances for the preparation of study materials. It needs only extra efforts on the part of the teacher.

Yadav (1984) studied the effect of Mastery Learning Strategy on pupils achievement in mathematics, their self concept and attitude towards mathematics. The study employed a pretest post test control group design involving two groups of pupils. After the experimental test the experimental group exhibited significantly higher achievement in mathematics, more positive attitude towards the subject and improvement in self concept.

Koul (1986) conducted a study to find out the effect of Mastery Learning Strategy and achievement motivation and Test Anxiety of socially disadvantaged children. The major findings of the study revealed that the students taught through Mastery Learning Strategy (PSI & LFM) were significantly high in achievement motivation than the group taught through conventional method of teaching.

Chan and Cole (1987) tried to measured the role of attitude for the Mastery Learning model of Instruction with a view to examine the interactive effect of

cognitive entry behaviour with Mastery Versun Non Mastery Learning Strategies of Instruction on reading comprehension. The findings indicated that Mastery Learning makes great demand on time and effort of both teachers and students.

Patadia (1987) conducted a study to evolve a strategy for Mastery Learning in fifth grade Geometry. The Strategies consisted of the following combinations. 1) Introduction 2) Structured lecture, 3) Discussion 4) Problem solving 5) Mathematical Models 6) Individualised tutorial 7) Programmed learning material 8) Text books 9) Review and Practice 10) Mathematical games 11) Review and practice 12) Assignments 13) Feedback sessions 14) Formative and Summative tests. A sample of 94 students were utilised.

The study revealed the following:

1. The Strategy developed worked well as about 88% of the experimental group scored a minimum of 70% marks.

2. The achievement of the experimental group was significantly high

3. The Strategy was liked by all pupils and was feasible in real classroom situation.

Choudari Vidya and Panda (1989) studied the effect of Mastery Learning Strategy on pupils achievement in English Grammar and their attitude. The sample consisted of 2 groups, of 26 students each from Indore University. They included that Mastery Learning Model is more effective than the Traditional Method in enhancing the achievement and attitude towards the English subject. They also recommended

that this type of study be replicated on a larger sample and for a larger duration to arrive at precise and more reliable results.

Choudari and Vaidya (1990) carried out a study to ascertain the relative effectiveness of Mastery Learning Strategy, Concept Attainment Model of varying levels of intelligence. Sample consisted of 114 students results showed clearly that low intelligence pupils have advantage from Mastery Learning Strategies than Concept Attainment Model and Instruction Method.

Nagarju (1995) made a study on Caroll Model in Rural Primary Education in Karnataka. It revealed that the school system because of its standardised norms of curriculum practices discriminates against rural school learning to inequality.

Mastery Learning: Studies in Kerala

Malini (1988) studied the effectiveness of Mastery Learning Strategy in the achievement of mathematics at secondary school level with a sample of 74 students as experimental and 65 students as the control group. She found that Mastery Learning Strategy is better at all levels viz. knowledge, understanding, application and comprehension.

Prasad (1988) examined the effectiveness of Mastery Learning Strategy on Achievement in English of secondary school pupils with two divisions of VIII standard students as sample. This study revealed that the Mastery Learning Strategy helps the teacher to identify particular points in the instruction that needed

modification and also serves as a powerful source of mental health. This strategy seemed to produce markedly greater student interest and attitudinal change thus produces significantly higher achievement.

Divakaran (1989) studied the effectiveness of Mastery Learning Strategy on the Achievement in Malayalam of Low Cognitive Entry Behaviour secondary school pupils. The sample consisted of 90 students and was equally divided as experimental and control groups. His study established the superiority of the Mastery Learning Strategy. It also revealed that the two groups were identical in knowledge outcomes but the Mastery Learning Strategy in effective in realising the understanding level and there was no difference in the case of higher objectives viz. application. Since the mean achievement score for the 14 out of 19 comparisons were found high the investigator concluded that Mastery Learning Strategy is more effective than the Conventional Method especially to low cognitive entry behaviour students.

Malini (1990) studied 12the effect of certain cognitive variables and Mastery Learning Strategy on achievement in Mathematics of Secondary school pupils. It was conducted in – with a sample of – pupils objectives of the study were (1) To examine the effect of Mastery Learning Strategy on Teaching Mathematics (2) To investigate the effect and inter action effect of non verbal and verbal intelligence and Mastery Learning Strategy on achievement in Mathematics (3) To investigate the main effect and interaction effect of Mathematical creativity and Mastery Learning Strategy on achievement in Mathematics. Findings of the study revealed that pupils taught

through Mastery Learning Strategy go higher achievement and much advantage over Control Group taught through Convention Method of Teaching.

Radhakrishnan (1991) studied the effectiveness of Mastery Learning Strategy in teaching English Grammar in High Schools. The main objective was to find out whether the students trained using the strategy could attain 90% mastery one group pretest post test design was used. The sample consisted of 306 High School students. Analysis of the data proved the effectiveness of the Mastery Learning Strategy in Teaching English Grammar in High School.

Mathayi (1992) verified the effectiveness of Mastery Learning Strategy on achievement in Biology of Secondary School pupils. His major objectives were to test the significance of Mean achievement scores and Mean Retention scores in Biology. And also to find the effect of intelligence and Strategies of Teaching Biology on the Mean achievement scores in Biology. The study revealed that the pupils taught through Mastery Learning Strategy achieved significantly higher in Biology than the pupils taught through Conventional Method in knowledge comprehension and application level established the effect of formative testing. Further the study also revealed that for learning higher objectives, the low intelligence pupils in the experimental group reach the level of high intelligence pupils in the Control Group. The results also revealed that Mastery Learning Strategy is move useful and effective in getting significantly high scores in retention test than students taught through Conventional Method.

Gopakumar (1994) studied the effectiveness of Mastery Learning Strategy in Teaching English Grammar in Standard VII. The sample included 58 urban and 35 Rural English Medium students. Since the mean achievement scores of the post tests are found to be greater than the mean achievement scores of the pretest, he concluded that Mastery Learning Strategy is more effective than the Conventional Methods of Teaching English Grammar.

Radhika (1997) conducted a study to test the effectiveness of Mastery Learning Strategy in Teaching Geography in Standard VII. The sample consisted of 51 VIII standard students from Trivandrum district. The study showed that the Mastery Learning Strategy was able to provide high achievement (98%). It also proved the principle that any teacher can help virtually all students to learn excellently, quickly and self confidently. Mastery Learning Strategy appeared to be an appropriate strategy for effective implementation of equality of educational opportunities.

Samuel (1997) studied the effects of Mastery Learning on certain affective outcomes of mathematics learning. Her study established the effectiveness of mastery learning.

Shooja (1997) carried out a study to test the effectiveness of Mastery Learning Strategy on Physics achievement of secondary school pupils. She found out that Mastery Learning Strategy is really helpful in achieving higher level objectives. Further study proved the effectiveness of Mastery Learning Strategy over Traditional Method for achievement in Physics at secondary level.

Jaffer (2000) examined the effectiveness of Mastery Learning Strategy for teaching Geography in secondary school. The sample consisted of 43 Experimental Group students and 40 Control Group students. The study showed that the Mastery Learning Strategy is effective for teaching Geography.

Krishnan (2000) conducted a study on the effect of Mastery Learning Strategy an achievement in Hindi of secondary school pupils and Mastery Learning Strategy is superior in achievement than Conventional text book approach. There was significant difference in the Hindi achievement of boys and girls of experimental and control groups. He further found that there is significant difference at knowledge, understanding and application levels. The students could active 100% Mastery at Knowledge and Understanding levels and 70% at Application level.

Sreelekshmi (2000) studied the effectiveness of Mastery Learning Strategy an achievement in Biology of secondary school students. She arrived at the conclusion that Mastery Learning Strategy is more effective for Biology teaching and it is the most useful method for attaining the objectives in knowledge, understanding, application and skill levels.

Advanced Organiser Model : Studies Abroad

Ethiveerasingam (1971) compared the effect of advance presentation of organizers on complex verbal learning and retention by agricultural students in New York with a sample of 182 eleventh grade students. The techniques of analysis of

variance was used and seen that there is no significant differences between treatments. There were also no significant interactions between retention and treatment.

Munford (1971) tested the effectiveness of Advance Organiser Model with a sample of 51 college students and found that there were no significant differences among the groups in the amount of initial learning or retention.

Barrow (1973) studied the effect of an advance organizer in an activity centred science programme. The sample was VII grade students. He found no positive effect on learning situation.

Murchison (1975) explored the usefulness of Advance Organiser Model for the teaching of science to IX grade students. The sample consisted of four groups of students. A Multivariate Analysis of Variance was used. The findings showed that IQ and Motivation were each significant and treatment differences were significant.

Goodman (1977) investigated the effects of treatments on the learning of a unit on descriptive statistics. The sample consisted of 196 ninth and tenth grade geometry students. The result of this study showed no significant effect due to treatment and no significant interactions. There was significant effect due to ability.

Geiger (1978) studied the relation between learner personality traits and verbal forms of Advance Organiser Model and determined whether learning and retention are facilitated by the Advance Organiser Model and if the advance organizers are differentially effective among learners who demonstrate varying degree of the selected

personality traits with a sample of 81 VIII grade students. It was found that Advance Organizer format did not have any significant effect on learning, and there was a trend for the visual advance organizer group to achieve higher scores on learning and retention.

Oppong (1978) investigated the facilitative effects on achievement of organizers learnt to mastery using geography materials at the IX grade level. The sample consisted of 60 IX grade social studies students. The findings showed that the use of advance organizer before each text chapter should significant superiority in achievement when compared with the non organizer group using text material only.

Stallan (1978) assessed the effects of method of organization of individualized learning materials using two types of pre-instructional strategies with high and low readers. The sample consisted of 75 high school students. The findings showed that on the basis of the main effect for method of instruction and reading level, there was no significant difference between mean gain scores of the three groups.

Borine (1982) investigated three instructional method based on Ausubel's concept of meaningful learning especially the effectiveness of 200 word advance organizers, 20 word advance organizers and no advance organizers were investigated using expository passage. The sample consisted of 121 seventh grade students. The findings indicted that the 20 word advance organizer at level readers were superior to the 200 word and no advance organizer on delayed retention. For the above level

readers on delayed retention, there were no facilitative effects among the 200 word, 20 word and no advance organizers readers.

Brune (1982) examined the effects of Advance Organizer of Listening Comprehension among learning disabled and non learning disabled adolescents in grades seven and eight. The sample consisted of 30 learning disabled and 30 non learning disabled adolescents matched for sex, grade, placement. The findings showed that Advance Organiser Model facilitated listening comprehension for both learning disabled and non disabled groups in both narrative and expository modes.

. Tamthai (1982) determined the facilitating effects of a pictorial diagrammatic advance organizer on science learning achievement with sample of 188 VIII grade students. The findings showed that the advance organiser did have any facilitating effect on female students who were field independent while it inhibited the science learning of field dependent female students.

Noel (1983) investigated the effect of Advance Organizers on transfer of rule learning with a sample of 72 V and VI grade elementary students in Florida. The findings showed that while students benefit from systematically designed instruction to teach rules, advance organizers incorporated in that instruction do not necessarily enhance transfer of learning.

. Dennis (1984) measured the effect of advance organizers and repetition on achievement in a high school biology class. The sample consisted of 4 groups of X

grade students. The findings showed that there was no significant interaction between treatment on the two dependent variables. However there was a significant gains in achievement by students in all groups from pretest to post-tests.

Livington (1984) investigated the effects of advance organizer and direct instruction passages for high and low ability VIII grade students in the learning and retention of meaningful verbal material. The sample consisted of 210 VII grade students. The findings showed that there was no statistical difference between the treatment. High ability subjects in the advance organizer group achieved significantly higher scores than low ability students in the group.

Carnes (1985) investigated the effect of Micro Computer Tutorial Physics programme with advance organizers used in various sizes of groups with a sample of 100 high school students. It was found that students working in groups of three and four on computer tutorials had significantly better rates of learning than, students working alone, while no significant differences in achievement or retention were observed.

. Morgan (1985) assessed the effects of two types of pre-laboratory exercises when used as advance organizers in an introductory biology laboratory course on student achievement and attitude towards biology. The sample consisted of 40 students. The findings showed that there was a statistically significant facilitating effects of advance organiser on both student achievement and student attitudes.

Ralan (1991) conducted a study on the effectiveness of visual comparative organizer in teaching Biology. It was found that the Advance Organizer did have a facilitating effect on all levels of learning out comes.

`Rineheart et al. (1991) conducted a study on the effectiveness of Advance Organiser Model on test recall by poor readers. The findings showed that the experimental group who used concept maps as Advance Organiser Model benefited much better than the control group.

Koru (1992) conducted a study on the effect of Graphic Advance Organizers on Maths and Science comprehension with high school special education students results revealed that the use of Graphic Advance Organizers generated higher scores in maths and science.

·Pandey and Purohit (1993) investigated the efficacy of Advance Organiser Model in comparison to teachers training model for learning outcomes in educational psychology of B.Ed. students. The findings showed that Advance Organiser Model was superior to Traditional Teaching Method in facilitating in educational psychology to B.Ed. students.

· Saidi (1993) in his study on the impact of Advance Organizers upon students achievements in computer assisted Video instruction found that the Advance Organizers do not facilitate transfer of learning in computer assisted Video instruction.

Downing and Agnes (1995) conducted a study on the effectiveness of Advance Organizers advocated for the improvement of presentation methods of teaching expository learning based on David Ausubel's theory of meaningful learning. They found that the Advance Organizer allowed for oral presentation by the teacher with ensuring discursion resulted in the pretest and resilient recall.

Harley (1995) compared the effect of two visual advance organizers on comprehension and retention of a written passage in a foreign language in elementary school. They used Video-pictures and teachers narrative as Advance Organizers and found that Video was the most effective organizer of the three.

Conard (1997) presented a paper on the effect of structure and inter actively on internet based instruction. The findings confirmed that a good design of internet based instruction improves students achievement of learning out comes.

Advance Organiser Model: Studies in India

Chitriv (1983) ascertained comparative effectiveness of Ausubel strategy and Bruner strategy with that of traditional strategy for acquisition of certain concepts in Mathematics. Sample consisted of 127 XI grade students of, science stream. He concluded that Ausubel's strategy was superior to traditional strategy for teaching mathematical concept, so far as knowledge, transfer and heuristic transfer of concepts were concerned and Ausubel's strategy was superior to Bruner's strategy for teaching mathematical concepts to eleventh grade students, so far as enhancing concept transfer was concerned.

Budhisagar (1986) conducted a study on the development and comparison of Instructional material developed by using Advance Organiser Model and Operant Conditioning Model for teaching Educational psychology for B.Ed. students. The sample consisted of 139 students teachers in the Department of Education in DAV at Indore. She found that the instructional material based on Advance Organiser Model as well as Operant Conditioning Model were significantly superior to the Traditional method. Intelligence was found to be effective significantly the over all achievement of students.

Panda (1986) determined the effect of Advance Organiser Model on learning from text material of ninth grade pupils, the effect of set induction on learning of ninth grade pupils the effect of Advance Organizer Model and Traditional Method of teaching on the achievement of ninth grade pupils and the influence of interaction between methods of instruction, sex and criterion test. The sample consisted of 60 students of St. Mary's High School, Indore. He found that the difference between the mean achievement of pupils studying through Advance Organiser Model set induction and Traditional Method were significant.

Pandey (1986) examined the effectiveness of Advance Organiser Model and Inquiry Training Model for teaching social studies to class 8 students. The major findings were:

1. The treatments had different effects on the pupils achievement.

2. The difference in means of gain scores in achievement due to Advance Organiser Model and conventional method was significant at .05 level.

Senapati (1986) compared programmed learning material, Advance Organiser Model and Traditional Method in terms of achievement of student and studied the effect of personality factors and their interaction with the achievement of students. Sample consisted of 139 student teachers in the department of education in DAV at Indore. He found that Advance Organiser Model was effective than both the Programmed Learning Material and Traditional Method in terms of achievement of students on criterion test.

Rajoria (1987) studied the effect of method of teaching, residential background and their interaction on achievement in science of class VIII students. The sample consisted of 114 students of class VIII in Government Middle School No.24 at Indore. Findings showed that Advance Organiser Model is superior to Traditional Method.

. Kaushik, N.K. (1988) Studied the long term effect of Advance Organizers upon achievement in Biology in relation to reading ability, intelligence and scientific attitude of the learners and found that the general introduction or an over view which generally precedes learning material, is less effective as compared to the advance organisers. Secondly the benefit derived from advance organizers is positively correlated with higher intelligence, reading comprehension and scientific attitude.

. Mathur, R.G (1988) Examined the effects of Mastery Learning Programme in statistics on the achievement self concept and attitude towards statistics of nursing

students. He found that Mastery Learning Strategy is an effective strategy in terms of achievement, self concept and attitude towards Statistics for both under graduate and post graduate students. He also established the effectiveness of Mastery Learning Strategy in reducing the gap between repeaters and non repeaters.

- Sood, K (1990) in her study on comparative effectiveness of Advance Organizer Model and Concept Attainment Model for acquisition of language concepts in relation to cognitive style, intelligence and creativity reported that Concept Attainment Model was make effective than Advance Organizer Model in teaching of concepts in Hindi. Intelligence, creative levels and cognitive style were redundant factors so far as the learning of concepts were concerned.

- Gupta. S (1991) conducted a study on the effectiveness of Advance Organizer Model of Ausubel in developing teaching competence of student teachers and their attitude towards teaching in Agra University. He found that Advance Organizer Model is effective in developing teaching competence among students teachers under simulated as well as class room conditions.

Jaimini, N (1991) conducted a study on the effect of teaching strategies on conceptual learning efficiency and retention in relation to divergent thinking Main objective was to investigate the relative effectiveness of Advance Organizer Model and Concept Attainment Model on conceptual learning efficacy and retention of Chemistry concepts in relation to divergent thinking indicated that although both

Advance Organizer Model and Concept Attainment Model were equally effective in fostering concept learning the advance organizer model was comparatively more beneficial in concept learning to pupils with high divergent thinking. The Advance Organizer Model was found to be more effective than Concept Attainment Model in the retention of concepts irrespective of the level of divergent thinking of the pupils.

· Kaur, R.P. (1991) aimed at comparing the effectiveness of Advance Organizer Model and Concept Attainment Model in relation to the creativity of students and found that for teaching concepts in economics both the models are effective and that Advance Organizer Model is more effective than Concept Attainment Model. The inter action between teaching strategies, intelligence and creativity were not found to be significant.

Korey (1992) conducted a study on the effect of graphic Advance Organiser on mathematics and science comprehension with high school special education students. Results revealed that the use of Graphic Advance Organiser generated higher scores in mathematics.

Mahajan, J (1992) made a comparative study of the effectiveness of two models of teaching viz. Bruner's Concept Attainment Model and Ausubel's Advance Organizer Model on teaching abilities of student teachers and students in various schools, her findings indicated that during the peer group sessions as well as in class room teaching sessions the group taught by Concept Attainment Model was found to

be superior to the groups taught by Advance Organizer Model as well as the routine method as far as the teaching ability of student teachers was concerned.

Advance Organiser Model: Studies in Kerala

Vasu (1983) studied the effect of biology instruction based on Ausubel's learning theory on the achievement of pupils in Secondary Schools. His conclusion was that the Ausubelian approach is more effective than conventional method of teaching biology in secondary schools.

George (1984) conducted a study on content organization in Chemistry for standard VII based on Ausubel's meaningful verbal learning. The findings showed that Ausubelian approach of content organization and teaching chemistry is superior to conventional method of teaching.

Cahandini (1989) examined the application of information processing model in the teaching of history at the under graduate level. The results indicated that the Advance Organizer Model and Inquiry Training Model are more effective than the Traditional Methods in the teaching of history.

Joseph (1990) in his study examined the effect of Concept Attainment Model and Advance Organizer Model for the teaching of Physics in Standard VIII. The study revealed that both the models namely Advance Organizer Model and Concept Attainment Model were effective than Traditional Method at knowledge understanding and application levels.

Preetha (1990) conducted a study to compare the effectiveness of Advance Organizer Model, Inquiry Training Model and Traditional Method for teaching of mathematics. The findings of the study showed that Inquiry Training Model is superior to Advance Organizer Model and Traditional Method for the teaching of Mathematics. Advance Organizer Model was found to be much better than Traditional Method.

• Gopakumar (1995) compared the effectiveness of Advance Organiser Model and Inquiry Training Model on Mathematics achievement at secondary school level. The findings showed that Inquiry Training Model is superior to Advance Organiser Model.

. Meeraraj (1995) studied the effect of Advance Organiser Model as a model in learning and retention of Mathematics at secondary school level. The findings revealed that the experimental group differ significantly in learning and retention of Mathematics. That is it supported the use of Advance Organiser Model.

. Philip (1995) studied the effect of Advance Organiser Model in the teaching of ecnomics in Standard IV and established the superiority of Advance Organiser Model over Traditional Method for teaching economic.

. Thomas (1995) conducted a study on the effect of Advance Organiser Model on Mathematics achievement in Comparison with the conventional method of teaching at secondary level. From his findings it is clear that Advance Organiser Model is superior to Conventional Method of Teaching under the objective understanding and application. But not significant at knowledge level.

- Varghese (1995) studied the effect at Advance Organiser in the Teaching of Physics and established the effectiveness of Advance Organiser Model and Traditional Method.

- Janardhanan (1996) studied the effect of Advance Organiser Model as an instructional strategy on biology achievement of secondary school pupils. The study reveals that there is significant difference between mean scores on achievement of the experimental and controlled groups and under the objectives understanding and application. There is no significant difference at the knowledge level.

- Mohammed (1996) studied the effect of Advance Organizer Model on biology achievement at the secondary school level. The main objective of the study were to compare the effectiveness of Advance Organiser Model with that of Traditional Method and also to compare the effect of Advance Organiser Model with that of Traditional Method on biology achievement under various dimension such as knowledge, understanding and application. The findings showed that Advance Organiser Model is effective than Traditional Method under the categories of objectives understanding and application.

Kurian (1997) examined the effect of Advance Organiser Model on the achievement in Chemistry of the secondary school students. The study envisaged the effectiveness of Advance Organiser Model over Traditional Methods.

/ Mathen (1997) conducted a study to examine the effect of Advance Organiser Model of teaching over Traditional Method of teaching Mathematics at secondary

school stage. Her study also established the superiority of Advance Organiser Model over Traditional Methods for the teaching of Mathematics.

Mathew (1998) conducted a study on the effectiveness of Advance Organiser Model on the achievement in Basic science of Upper Primary level students. She concluded that Advance Organiser Model is more effective that the Traditional Method on achievement in Basic science of Upper Primary students at Knowledge Understanding and Application levels.

· Remadevi (1998) conducted a study on the application of Information processing models of teaching Chemistry at the secondary and higher secondary levels. The major findings were: The Information Processing Model of teaching is far superior to the conventional method of teaching with respect to knowledge, understanding and application levels. Pupils belonging to high as well as low intelligence categories, and high as well as low achievers on scientific attitude level scale taught through. The Information Processing Model were found to have significantly higher achievement than those taught through Conventional Method.

ɩ Anitha (2000) examined the effectiveness of Advance Organiser Model of teaching on Social Science achievement of secondary school pupils. The study proved that greater achievement in Social science is possible by making use of Advance Organisers. The experimental group Scored very high in three major objectives as Knowledge understanding and Application level.

CONCLUSION

Theoretical overview and the empirical studies provide a wide perspective of the present study. It is considered as the base line of investigation. Research studies on the Models of Teaching are found to be gaining increasing popularity. The models mostly adopted were those developed by Joyce Bruce and Weil Marsha. A large number of studies are conducted in abroad and outside Kerala in Advance Organizer Model and Mastery Learning Model. But there are only a few studies in Kerala related to the above referred models. Almost all the Kerala studies are only Post Graduate level studies. The fact is that majority of the studies reviewed establish the effectiveness of Advance Organiser Model and Mastery Learning Model over Traditional Methods of Teaching.

METHODOLOGY

C. Bhamini "Effectiveness of mastery learning strategy and advance organisers model over traditional methods for teaching Malayalam " Thesis. Department of Adult and Continuing Education and Extension services , University of Calicut, 2002

METHODOLOGY

METHODOLOGY

The purpose of the present study was to test the effectiveness of Mastery Learning Model and Advance Organiser Model over Traditional method of teaching Malayalam. This requires the application of relevant procedure and the statistical processing of the same. The details of Design selected, variables, Hypotheses, sample, content area, procedures adopted, tools employed, statistical techniques used and data analysis involved in the present study are described in this chapter under the following heads.

1. Design of the study.

2. Variables

3. Hypotheses

4. Content area

5. Sample

6. Tools

7. Description of Tools.

8. Experimental Procedure

9. Treatment of data and statistical techniques

3.1 DESIGN

This study comes under the purview of experimental study. Best (1995) remarks that "Experimental design is the blue print of the procedure that enable the researcher

to test the hypothesis by reaching valid conclusions about relation ships between independent and dependent variables."

The important and commonly used experimental designs are :

1. Pre experimental design : The test effective for it provides either no control group or no way of equating the groups that are used.

2. True experimental design: employs randomization to provide for control for equivalence of groups and exposure to treatment.

3. Quasi experimental design: Provides a less satisfactory degree of control used only when randomisation is not feasible.

Considering the purpose of the present investigation, the type of variables manipulated and the conditions prevailing, it was decided to utilize the post test only equivalent group design of experiment for the study. This design is one of the most effective design in minimizing the threats to experimental validity. More over it is a feasible design that can be used in our class room situations.

3.2. VARIABLES

There were 1) Independent, 2) Dependent, and 3) Controlled variables in the study.

The details of variables used in the present study are given in the following table.

Table 3.1

Details of variables in the study

Dependent Variable	Independent Variable	Controlled Variable
1. Achievement in Malayalam	1. Mastery Learning Model 2. Advance organiser Model 3. Traditional Method	1.IX class of pupils 2.Subject taught (selected topics in Malayalam 3. Intelligence of pupils 4. SES of the pupils 5. Sample school

3.3. HYPOTHESES

1. There will be no significant difference in the attainment of Malayalam Language taught in Mastery Learning Model, Advance Organiser Model and Traditional Method..

2. There will be no significant difference in the attainment of Malayalam language taught in Mastery Learning Model and Traditional Method.

3. There will be no significant difference in the attainment of malayalam language taught in the Advance Organiser Model and Traditional method.

4. There will be no significant difference in the attainment of Malayalam language taught in the Mastery Learning Model and Advance Organiser model.

5. If the effect of three instructional models is studied separately with respect to three major objectives of cognitive domain i.e knowledge, Understanding and Application, there will be no difference in the levels of attainment.

3.4. CONTENT AREA

The sample selected for the present study was IX standard pupils and the subject selected was Malayalam. The study was carried out during 2nd July2001 to 6th November 2001. While selecting the topics for the teaching care was taken to include the topics prescribed by the Kerala State Government for the corresponding term. More over special emphasis was given for teaching Malayalam grammar during that term. The investigator consulted other High school Malayalam teachers who were handling Malayalam in IX standard regarding the area of teaching to be considered for the particular period. During the discussion the investigator could clearly mark out the content area for the study. Then she selected five Prose Lessons and One Poem for the study.

Table 3.2.

Details of the content and lessons included in the study

Sl. No.	Content	Lesson
1	Vibhakti, Vachakam, dyotakam, namam, namaviseshanam	Bhashayum madhyamangalum
2.	Kriya Bhetakam, Dyotakam	Padachonte choru
3	Dwitwasandhi, Dwandasamasam	Ekalokam
4	Lopasandhi	Yesudevan
5	Anuprayogam	Karnanum Karmasakshiyum
6.	Vrutam (Indravajra, Upendravajra, upajathi)	Sishyanum makanum
7	Alankaram (Deepakam, Aprastuta prasamsa, arthantaranyasam, kavyalingam, swabhavokti, virodabhasam)	

These can be broadly classified into 7 units of Malayalam grammar as follows:

1. Sabdam
2. Vibhakti
3. Sandhi
4. Samasam
5. Anuprayogam
6. Alankaram
7. Vrutam

3.5. SAMPLE

The population consisted of the pupils studying in IX standard of Govt Higher Secondary School, Beypore, Kozhikode district, Kerala State. There were 350 pupils studying in IX standard, out of which the above 126 only were selected and grouped into three consisting of 42 each, on the basis of previous year's scholastic achievement, level of Intelligence and Socio economic status.

The sampling technique used was purposive but representative of the population. The investigator decided to take a purposive sample because of the experimental nature of the study and knowing the demands and limitations.

Selecting of sample was done at the beginning of the academic year i.e. in June 2001 it self. Analysis of intelligence and socio economic status scores are described in chapter 4. Details of sample selected for the present investigation is depicted in Table.

Table 3.3

Details of distribution of pupils selected for the study

	Groups	Boys	Girls	Total
1	Mastery Learning Model	20	22	42
2	Advance Organiser Model	21	21	42
3	Traditional Method	22	20	42
	Total	63	63	126

3.6. TOOLS

The following tools were used for data collection.

Intelligence Test

Socio Economic Status Scale

Pre –requisites test

Lesson plans on Mastery Learning Model, Advance Organiser Model and Traditional Method

Achievement test in Malayalam

3.7. DESCRIPTION OF TOOLS

Raven's Standard Progressive Matrices

J.C.Raven onstructed a Progressive Matrices to measure the educative component of 'g' as defined in Spearman's theory of cognitive ability. The test is made up of 5 sets or series, of diagrammatic Puzzles exhibiting Serial changes in two dimensions simultaneously. Each puzzle has a part missing, which the person taking the test has to find out from the options provided. The test consists of 60 problems divided into five sets (A, B, C, D, E) each comprised of 12 problems. In each set the first problem is as nearly as possible self-evident. The problems which follow are built on the argument of these that have gone before and become progressively more difficult.

The five sets provide five opportunities to grasp the method of thought required to solve the problems and five progressive assessments of a person's capacity

for intellectual activity. To ensure sustained interest each problem is boldly presented accurately drawn and as far as possible, pleasing to look at.

The SPM was originally designed to cover to the widest possible range of mental ability and to be equally useful with persons of all ages, whatever be their education, nationality or physical condition.

Illustrations from the sets A, B, C, D & E are given as Appendix II (c).

All subjects are given exactly the same series of problems in the same order and asked to work at their own speed, without interruption, from the beginning to the end of the test. As the order of problem provides the standard training in the method of working, the test can be given as an individual, a self-administered, or a group test. A person's total score provides an index of his intellectual capacity.

This test is a standardised one and its validity and reliability have been established . Moderates to high correlation are reported for SPM and various nonverbal and performance test of intelligence. Test retest correlation ranged from 0.55 to 0.84.

The test book-let and response sheet each were given to the pupils. The investigator explained to the testees what is to be done. They were asked to write the number of the pattern to be filled in the gap of each puzzle in the space provided in the response sheet. (The response sheet is given as Appendix II (a) and the scoring key is given as Appendix II (b).

The response sheet was scored and the scores were subjected to a test of statistical significance (ANOVA). The Scores of the intelligence test are given as Appendix II (d) and the results of ANOVA are detailed in Chapter IV. The result indicates that the three groups do not differ significantly with respect to their scores in the intelligence test. Thus the groups as a whole is homogeneous in respect of their intelligence.

Socio-Economic Status Scale

The Socio-Economic status of the pupils was measured using the socio economic status scale developed by Kuppuswamy and modified by Dr. K.S. Pillai in 1973. Later the scale was modified by Subramanyadas in 1996; according to the cost of living index. He modified the criteria of weightage given to monthly income in Socio Economic Status Scale. Thus modified version is adopted by the investigator for the present study. The scale consists of six items, the first five including the personal data, and that of the sixth indicates the socio economic status of the pupils (A copy is given as Appendix III (a).

The initial and the modified versions of Socio Economic Status Scale is given below.

Table 3.4

Weightages given in Socio-Economic Status Scale

No.	Education	Weigh-tage	Occupation	Weigh-tage	Income per month	Weigh-tage
1.	Masters Degree/ Professional degree and above	10	Professional	10	Above 1000	10
2.	Bachelor's degree	8	Semi-Professional	8	751-1000	8
3.	Pre-Degree/Pre University	5	Skilled workers	7	501-750	6
4.	S.S.L.C	4	Semi skilled	4	301-500	4
5.	Up to 7th Std.	2	Workers/Unskilled workers/ Labourers	2	101-300	3
6	Literate	1	Unemployed	0	100 and below	1
7.	Illiterate	0				

Table 3.5

Modified Criteria to give Weightage to Monthly Income in
Socio-Economic Status Scales

Income per month (Rs.)	Weightage
Above 8000	10
6001-8000	8
4001-6000	6
2401-4000	4
801-2400	2
800 and below	1

Occupational status is detailed as below.

1) Professional

Such as ministers, judge, bank executives and officials, doctors, engineers, lawyers, University level teachers, heads of research organisation, heads of govt. Departments, Secretaries of the Govt, business executives.

2) Semi-Professionals

Chemists, Druggists, qualified nurses, teachers, managers, Superintendents, officers, minor business men, contractors, small land lords, Sub-inspectors of Police, excise inspectors, Sub-registrar, Assistant Educational Officers, Block Development Officer, Officer of the sub district etc. will come under this category.

3) Skilled workers

Mechanics, Filters, Electricians, Driver, Photographers, Laboratory Assistants, Carpenter, Mason, Vakil Clerks, Police head Constables and the like will come under this category.

4) Semi–skilled workers

Farmers, Small Scale Mechanics, Library Attenders, Police Constables etc.

5) Unskilled workers/Labourers

Coolies, Ordinary Labourers, Watchman, Peons etc.

6) Unemployed

Those who are not having any employment.

The scale developed by Kuppuswami was modified by K.S. Pillai in 1973. The criteria adopted for giving weightage to the level of income was further modified by Dr.Sivarajan and Subrahmaniadas with the consent of the experts in educational research and the Department of Economics and Statistics, Govt. of Kerala. The investigator without major modifications used the same scale. Weightage has been given according to the above table. The Scores (total of the weightages) thus obtained were subjected to a test of Statistical significance. (i.e., analysis of variance) The scores are given as Appendix III (b) and the result of the test of significance is detailed in Chapter IV.

The result indicates that the groups do not differ significantly with respect to their SES scores or the groups as a whole is homogenous with respect to their Socio Economic Status.

Pre Requisites Test

The gaps in the existing cognitive structure of a pupil always stand as a barrier in acquiring new knowledge. To enable the pupils to acquire the new knowledge meaning fully the gaps should be filled up in time.

For that the pre requisites for each lesson should be sorted out, before teaching the content. If the pupils are accustomed with the Prerequisites for learning their cognitive structure and the mind will be ready for learning. The pupils having Pre requisites will learn the content effectively and easily.

Since the study was carried out from July 2001 to October 2001 the study included the grammar portions from the prescribed syllabus for that term. Through a thorough analysis of the selected portions the Prerequisites for those portions were identified. For this, the investigator contacted certain senior teachers and discussed with them the area to be included for identifying the Pre-requisites to learn the contents proposed for the treatment. With their help and with the directions of the supervising teacher the investigator prepared a list of questions for measuring Prerequisites. After that she consulted certain experts in the field. Minor modification were made according to their opinion and finalised the Prerequisite tests.

The test contains 45 items of which five of them were oral type questions. The maximum marks for the list was 50 marks. [Copies of the Pre-requisites tests both oral and written are given as Appendices IV (a) (b)].

The three groups i.e. Mastery Learning Model, Advance Organiser Model and Traditional Method were tested for their Prerequisites. Out of 126 pupils taken for the study only 112 of them were having enough prerequisites, i.e., 98% to 100%. The rest 10 pupils were having only 70% to 80% and 4 pupils were having only 50% to 69% of the required prerequisites. Those who were lacking behind were given remedial measures. Thus the groups were made ready for the experiment. The Prerequisites test was conducted on 10th June 2001 [Prerequisites test scores are given as Appendix IV (d)].

Lesson plans on Mastery Learning Model, Advance Organiser Model and Traditional Method

The subject area of the present study was Malayalam Grammar. The seven units of IX std Malayalam Grammar were taught in the study. Twenty four lesson plans of each model were prepared and taught i.e. Mastery Learning Model, Advance Organiser Model and Traditional Method.

In Mastery Learning Model and Traditional Method, the lesson plans were prepared on the basis of Kerala State Institute of Education format. The Advance Organiser Model lesson plans were prepared on the basis of lesson plan suggested by Joyce and Bruce (1978) [Specimen given as Appendices. V (a) & (b), VI (a) & (b)]

Achievement Test in Malayalam

The present achievement test was intended to measure the scholastic achievement of the pupils. after the treatments in Mastery Learning Model, Advance Organiser Model and Traditional Method were treated considering all relevant aspects. The maximum marks was fixed as 100. (One hundred.)

This test was Constructed and Standardized by the investigator under the Guidance and Supervision of her Guide. The test is constructed based on accepted principles as shown below:

1. Planning of the test.

2. Preparation of the test.

3. Pilot test.

4. Try out test

5. Item analysis

6. Preparation of the final test.

Planning the test

In this stage the following steps were involved:

1. Thorough analysis of the content was done to form the content out line of the test.

2. Made a clear objective out line reflecting the behaviour of the pupils.

3. Weightage to difficulty level was fixed.

4. Only objective type questions were included.

5. Prepared the blue print on the basis of the weightage assigned to content objectives, difficulty level and form of questions.

Preparation of the Preliminary test

After planning the test, next step in the construction of an achievement test is the preparation of a design. It is as follows.

Weightage to Objectives

In this achievement test it was decided to follow the Bloom's Taxonomy of Educational objectives. The three objectives namely knowledge, Understanding and

Application in the cognitive domain are only taken into consideration for the present test.

Weightage to Content Area

The content area of the test was chosen on the basis of the content utilized for the study.

Weightage to Difficulty Level

Regarding the weightage to difficulty level sixty percentage of the items with average difficulty and twenty percentage each with easy and difficult was decided for the present test.

Form of Questions

For ensuring objectivity only objective type questions were included. The total number was 100. Details of the weightage given to the various objectives, content area and difficulty level are detailed below.

Table 3.6

Weightage to Instructional Objectives. (Draft test)

	Objectives	Mark	Percentage
1	Knowledge	35	35
2	Understanding	40	40
3	Application	25	25
	Total	100	100

Table 3.7

Weightage to content area (Draft test)

	Content	Mark	Percentage
1	Sabdham	43	43
2	Vibhakthi	10	10
3	Sandhi	8	8
4	Samasam	5	5
5	Anuprayogam	6	6
6	Alankaram	12	12
7	Vrutam	16	16
	Total	100	100

Table 3.8

Weightage to difficulty level (Draft test)

Difficulty level	Mark	Percentage
Easy	20	20
Average	60	60
Difficult	20	20
Total	100	100

Table 3.9

Weightage to form of questions (Draft test)

No	Form of Question	No. of question	Marks	Percentage
1	Objective type	100	100	100
	Total	100	100	

Preparation of the design and blue print.

A well formulated objective test has two dimensions viz. behavioural aspects and content aspects. Coverage of behaviours implied objectives and coverage of syllabus necessarily be consisted in the test.

Blue print is a three dimensional chart specifying the content covered by the test in relation to the weightage assigned for different objectives and type of items. Here only objective items are opted and therefore the blue print is a two dimensional grid indicating the content area and the number of questions under each objective. These numbers also indicate the total marks allotted for each objective.

The blue print prepared for the Try out test is given in table 3.10.

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Table 3.10

The blue print of the Achievement test

No.	Objectives / Content	Knowledge	Understanding	Application	Total
1	Sabdham	15	20	8	43
2	Vibhakthi	5	4	1	10
3	Sandhi	3	3	2	8
4	Samasam	2	1	2	5
5	Anuprayogam	3	2	1	6
6	Alankaram	2	5	5	12
7	Vrutam	5	5	6	16
	Total	35	40	25	100

The blue print gives definite idea regarding the number of questions to be set from each sub unit their forms and scope. Based on the design of the test the investigator initially constructed 125 items. The sources used for the construction of the items included the reference book of bloom (1974), text book of Std IX, (Education Department, Government of Kerala) Keralapariyam, Bhasha bhooshanam, Vrithamanjari, etc. The items were edited on the basis of the opinion of the Supervising teacher. Expert opinions were also sought. The number of items in the final draft test was 100. (The draft test and panel of experts consulted are given as Appendices VIII (a) & (c), XI)

Organisation of the Test

The preliminary details regarding the constructed test i.e. name of the examination, title of the question paper, maximum marks, time allotted, instructions for answering etc were included at the appropriate places. Then the finalized items in the test have been arranged according to the design. Since the hierarchical order of objectives as given in the taxonomy is considered as the difficulty level also, the investigator followed the same arrangement as laid by Bloom (1956).

Pilot test

The various aspects of the achievement test namely the formation of objectives, items construction for the test, nature of instruction, items allotted, methods of answering, etc. were studied carefully by conducting a pilot testing to a small sample. For this the Preliminary draft test was administered to a randomly selected pupils comprising of 20 boys and 20 girls of Std IX in Govt. V.H.S. Meenchanda, Kozhikode. Along with the written directions, oral directions were also given to the pupils. They were given separate answer sheets. Time taken for the test was ranged from 1 hour 10 mts. to 1 hour 45mts. So the time for actual test was fixed as one hour and 30mts.

This process was utilized for screening the discrepancies crept in the test construction, assembling items, giving instruction and also to detect the ambiguity of the distracters.

After Pilot testing the test was edited again and the draft test was prepared. The scoring key was also prepared. Then prepared question booklet and scoring key which are given as Appendix VIII (a to d)

The investigator conducted the Pilot study in January 2001.

Mode of answering and scoring.

After the Pilot study the test items included were hundred in number and the time fixed was 1 hour and 30mts separate answer sheets were provided for the test. For answering the test items the pupils had to write the correct answer chosen from the bracket. A score of one was given to each right answer and zero score to each wrong answer.

A Try out of Achievement Test in Malayalam

Try out test is actually trial administration of the test to know exactly how the test will function in actual use. In any type of test construction try out testing is significant. It will help to find out the difficulty and discriminating levels; where by one can arrange sequential order. So try out test is a must for further improvement of the test.

Try out test sample

The process of sampling makes it possible to draw valid generalisations on the basis of careful observation of variables within a relatively small proportions of the

population. The validity reliability, difficulty index and discriminating power of the test depends on the sample selected for the try out test. This sample should cover all the relevant strata such as boys and girls, rural and urban, government and aided, etc. "For practical reason a sample of 370 students will be convenient for the purpose of administering the preliminary test though there is no compulsion that the number should be that it self" (Soman, 1986).

For the try out test 450 students of IX standard were included from 9 schools of different categories belonging to Kozhikode, Malappuram and Palakkad districts.

Table 3.11

Details of schools utilised for the try out test is given in the table below.

Sl.No.	Name of School	District	Boys	Total
1.	Feroke G.V.H.S.S.	Kozhikode	50	150
2.	Model Boys H.S.S.		50	
3.	Calicut Girls V.H.S.S.		50	
4	Tirur G.H.S.	Malappuram	50	150
5.	Parappanangadi G.H.S.		50	
6.	Valanchery H.S.		50	
7.	G.H.S. Kottayi	Palakkad	50	150
8	C.A.H.S. Koyalmanna		50	
9	G.H.S. Peringottukurissi		50	
	Total		450	450

Administration of try out test

The tryout test was administered during January 2002. The Head of the Institutions were informed earlier through the supervising teacher. Proper and sufficient instructions to the pupils were given before starting the test. Tests were administered with the assistance of the Malayalam teachers of those classes. Separate answer sheets were provided. The response sheets were scored after rejecting incomplete sheets. Only 370 sheets were used for the study.

Most of them completed within the given time. Others were given 5 to 10 more minutes.

Item analysis

The item analysis will help the test constructor to appraise the test as a whole. According to Ebel (1972). "Item analysis indicates which item may be too easy or too difficult which may fail for other reasons. To discriminate clearly between the better, and poorer examines." Item analysis suggests why an item has not functioned effectively and how it might be improved. The quality and merit of tests depends upon the individual item which is composed of. It is therefore necessary to analyse each item in order to retain only those that serve the purpose and quite reasonable. Item analysis thus becomes an integral part of both reliability and validity of the test. After the item analysis very hard and easy items were rejected

The Ebel's procedure (1960) was adopted for item analysis 370 answer sheets were arranged in the order of the scores from high to low. The high and low groups consisting of the upper and lower 27% of the total group respectively were taken for the study. The middle 46% of the total group were discarded from the item analysis.

Difficulty Index

The difficulty index of an item is represented by the percentage of the students who respond correctly each item. The more the percentage of correct responses the easier the item is. Difficulty index was calculated by using the formula.

$$DI = \frac{U + L}{2N}$$

U = Number of correct responses in the upper group

L = Number of correct responses in the lower group

N = Number of pupils in any of the group

Discriminating Power

The discriminating power of an item is evidenced by its power to discriminate between the upper and the lower groups. The difference between the correct responses in the two groups will indicate how far it can discriminate the two groups. Suitability of each item is tested in terms of Discriminating Power also.

Discriminating power was calculated using the formula:

$$DP = \frac{U - L}{N}$$

U = Correct responses in the upper group

L = Correct responses in the lower group

N = Number of pupils in any one of the group

Selection of Items

The data on the psychometric characteristics of item facilitated the final selection of item. 66 items with Difficulty Index between 0.4 and 0.6 and discriminating power 0.35 and above were selected. Thus obtained final test and the scoring key of the final test are also presented as Appendix.

The details of item analysis is given in table 3.12

Table 3.12

Data results of item analysis – Draft Test

Item No. in draft test	PU	PL	DI	DP	Item No. in final test
1	42	15	.29	.27	-
2	60	42	.51	.18	-
3	68	26	.47	.39	1
4	92	28	.60	.64	2
5	66	24	.45	.42	3
6	39	8	.24	.35	-
7	40	26	.33	.14.	-
8	73	31	.52	.42	4
9	83	71	.77	.12	-
10	79	37	.58	.42	5
11	83	30	.57	.53	6
12	70	28	.49	.42	7
13	74	30	.52	.44	8
14	79	37	.58	.42	9
15	40	30	.35	.10	-
16	55	35	.45	.20	-
17	69	31	.50	.38	10
18	85	31	.58	.54	11
19	52	39	.46	.13	-
20	73	35	.54	.38	12
21	84	36	.60	.44	13
22	86	25	.56	.61	14
23	69	14	.42	.55	15

Item No. in draft test	PU	PL	DI	DP	Item No. in final test
24	25	24	.25	.01	-
25	85	29	.57	.56	16
26	69	14	.42	.55	17
27	67	61	.64	.30	-
28	53	8	.31	.45	18
29	93	33	.63	.60	19
30	61	15	.38	.46	20
31	28	1	.15	.27	-
32	76	24	.50	.52	21
33	84	30	.57	.54	22
34	51	39	.46	.24	-
35	52	27	.40	.25	-
36	88	8	.48	..80	23
37	65	15	.40	.50	24
38	76	32	.54	.44	25
39	65	8	.37	.57	26
40	39	19	.29	.20	-
41	80	40	.60	.40	27
42	96	25	.61	.71	28
43	80	17	.49	.63	29
44	63	20	.42	.43	30
45	65	15	.40	.50	31
46	68	12	..40	.56	32
47	88	11	.50	.77	33
48	44	27	.36	.17	-

Item No. in draft test	PU	PL	DI	DP	Item No. in final test
49	84	36	.60	.44	34
50	74	⁄16	.45	.58	35
51	73	35	.54	.38	36
52	60	24	.42	.36	37
53	88	30	.59	.58	38
54	51	39	.45	.12	-
55	83	25	.54	.58	39
56	45	21	.33	.24	-
57	79	22	.51	.57	40
58	77	31	.54	.46	41
59	91	21	.56	.70	42
60	82	23	.53	.59	43
61	46	14	.30	.32	-
62	87	26	.57	.62	44
63	97	18	.57	.79	45
64	76	19	.48	.57	46
65	77	13	.45	.64	47
66	88	26	.57	.62	48
67	65	16	.41	.49	49
68	53	42	.48	.11	-
69	94	19	.57	.75	50
70	78	36	.57	.42	51
71	89	22	.56	.67	52
72	55	35	.45	.20	-
73	73	32	.53	.41	53
74	77	15	.46	.62	54
75	66	19	.43	.47	55
76	20	17	.19	.03	-

Item No. in draft test	PU	PL	DI	DP	Item No. in final test
77	44	31	.36	.10	-
78	65	30	.48	.35	56
79	69	35	.52	.35	57
80	39	19	.29	.20	-
81	81	36	.59	.45	58
82	82	64	.73	.18	-
83	65	17	.41	.48	59
84	41	23	.32	.18	-
85	66	28	.47	.38	60
86	10	14	.12	-.04	-
87	79	37	.58	.42	61
88	74	51	.63	.24	-
89	44	15	.24	.29	-
90	78	38	.58/	.40	62
91	80	34	.57	.46	63
92	45	17	.31	.28	-
93	45	18	.32	.27	-
94	90	30	.60	.60	64
95	26	17	.22	.09	-
96	85	25	.55	.60	65
97	91	22	.56	.69	66
98	28	2	.15	.26	-
99	45	10	.28	.35	-
100	50	65	.58	-.15	-

Final Test

After finalising the items to be included they were arranged in the order of difficulty level and the instruction and other details were added to get the final draft of the test. Preparation of the scoring key, writing down the preliminary details of the test, instruction already described in the preliminary testing will also form part of the work. Number of items in the final test was 66 [given as appendix IX (a)]

The weightage to content, weightage to objectives, weightage to difficulty level and blue print of the final test are presented in the tables below.

Table 3.13

Weightage to Instructional objectives – Final Test

Sl.No.	Objectives	Marks	Percentage
1.	Knowledge	22	33
2	Understanding	33	50
3.	Application	11	17
	Total	66	100

Table 3.14

Weightage to content area – Final Test

	Content	Marks	Percentage
1.	Sabdam	31	46.97
2	Vibhakti	7	10.61
3.	Sandhi	5	7.58
4.	Samasam	3	4.55
5.	Anuprayogam	5	7.58
6.	Alankaram	6	9.09
7.	Vritam	9	13.64
	Total	66	100.02

Table 3.15

Weightage to difficulty level – Final Test

Sl.No.	Difficulty Level	Marks	Percentage
1.	Easy	14	21
2	Average	40	61
3.	Difficult	12	18
	Total	66	100

Table 3.16

Weightage to form of questions – Final Test

Sl.No.	Form of questions	No. of questions	Marks	Percentage
1	Objective	66	66	100
	Total	66	66	100

Table 3.17

Blue print – Final Test

Sl.No.	Content	Know-ledge	Under standing	Appli-cation	Total
1.	Sabdam	10	15	6	31
2	Vibhakti	3	4	0	7
3.	Sandhi	2	2	1	5
4.	Samasam	1	2	0	3
5.	Anuprayogam	3	2	0	5
6.	Alankaram	1	3	2	6
7.	Vritam	2	5	2	9
	Total	22	33	11	66

Validity

The essential validates were established in the present test. By proper analysis of the content and objectives and by the preparation of the blue print in accordance with these curricular requirements content validity was achieved. The face validity is established by selecting 66 items from 100 items. Content validity is based upon expert judgement. The items were finalised only after consulting subject experts (jury panel given as Appendix XI).

Statistical validity is established by means of statistical techniques. In this method the score in the achievement in Malayalam were correlated with an external criteria. The external criteria taken was the marks obtained by the pupils in Malayalam in the second terminal examinations (Marks are detailed in Appendix   ).

Validity of the test was calculated with selected sample of 75 students from the sample used for tryout test. Due representation was given to different categories such as boys, girls, rural, urban, government, aided etc. The marks obtained in Malayalam by the 75 students for the second quarterly examination were collected and scores on the presently conducted achievement test in Malayalam were taken. The coefficient of correlation was calculated using the formula:

$$rho = 1 - \frac{6\sigma D^2}{N(N^2 - 1)}$$

And it is found to be .976. This shows high validity of the test.

The table given below gives the details for calculating validity

Table 3.18

Details for calculating validity

No.	X	Y	No.	X	Y	No.	X	Y
1	35	38	9	55	58	17	38	30
2	42	40	10	72	75	18	37	39
3	68	72	11	46	48	19	42	48
4	64	64	12	50	55	20	28	25
5	73	72	13	65	68	21	24	22
6	56	50	14	68	72	22	25	26
7	48	40	15	74	75	23	44	45
8	76	78	16	71	70	24	49	51

No.	X	Y	No.	X	Y	No.	X	Y
25	62	65	42	61	64	59	49	52
26	61	65	43	64	65	60	25	22
27	43	45	44	68	70	61	18	15
28	40	40	45	73	71	62	8	11
29	38	41	46	84	82	63	4	6
30	27	35	47	47	46	64	7	11
31	53	49	48	60	55	65	6	10
32	55	57	49	71	70	66	64	61
33	50	52	50	59	64	67	45	48
34	48	45	51	30	24	68	40	41
35	49	52	52	33	29	69	66	60
36	67	64	53	48	42	70	59	53
37	72	70	54	37	33	71	55	55
38	85	80	55	52	50	72	61	64
39	42	41	56	51	49	73	42	43
40	48	47	57	63	60	74	45	48
41	50	45	58	60	65	75	78	73

X = scores in Achievement test

Y = Terminal examination score

N = Total number of pupils

Reliability

Reliability is the trustworthiness of a measuring instrument. A test with a high coefficient of reliability the errors in measure will be reduced to a minimum. Reliable tests what ever they measure yields comparable scores upon repeated administration.

In the present study the reliability is found by split half method. In this method the test was divided into two equivalent halves and the scores of the two half tests were correlated. The first set of scores represent the scores of the odd numbered items and the second set of scores represent the scores of the even numbered items. The correlation coefficient to half of the test was found out by

$$\text{rho} = 1 - \frac{6\sigma D^2}{N(N^2 - 1)}$$

And it is found to be .873.

Details of the scores of odd and even numbered items are given in table.

The table given below shows the details for calculating split half reliability.

Table 3.19

Details for calculating split half reliability.

No.	Odd No. X	Even No. Y	No.	Odd No. X	Even No. Y	No.	Odd No. X	Even No. Y
1	30	22	20	16	17	39	21	19
2	20	12	21	18	19	40	19	16
3	24	17	22	15	16	41	24	25
4	12	12	23	21	23	42	23	21
5	14	13	24	25	25	43	23	22
6	16	18	25	17	16	44	21	18
7	15	12	26	18	14	45	24	22
8	10	11	27	23	21	46	29	28
9	21	19	28	15	19	47	20	21
10	14	16	29	16	17	48	10	9
11	21	20	30	16	18	49	12	14
12	12	13	31	25	26	50	11	13
13	16	17	32	31	32	51	13	16
14	17	21	33	14	13	52	14	10
15	20	17	34	17	17	53	2	4
16	8	6	35	31	29	54	5	6
17	7	9	36	12	15	55	3	5
18	5	5	37	18	14	56	15	16
19	14	11	38	22	20	57	19	19

No.	Odd No. X	Even No. Y	No.	Odd No. X	Even No. Y	No.	Odd No. X	Even No. Y
58	19	19	64	16	16	70	17	25
59	14	11	65	18	16	71	16	21
60	14	13	66	17	21	72	15	15
61	10	9	67	22	21	73	18	18
62	7	10	68	20	24	74	19	21
63	5	5	69	25	21	75	21	20

The value was found to be .873. From the reliability of the half tests the correlation coefficient of the whole test was found out by the formula:

$$r_{11} = \frac{2 \times \frac{1}{2}(1/11)}{1 + \frac{1}{2} \, 1/11} \qquad\qquad r_{11} = \frac{2 \times .873}{1 + .873} = .932$$

The correlation coefficient of the whole test indicates that the test is a reliable one.

3.8. EXPERIMENTAL PROCEDURE

Beypore Government Higher Secondary School where the investigator was working as high school assistant was selected to utilise for the study. The supervising teacher also contacted the then and there principal of Beypore Government Higher Secondary School for getting all possible help for the smooth conduct of the study. Thus it was decided to carryout the study during 2001-2002 academic year. By that time test standardisation, preparation of pre-requisites test, developing of learning

materials according to the models etc were over. In the beginning of the academic year the investigator collected the previous year scholastic achievement scores of the IX standard pupils in the schools. Their average achievement scores were tabulated (given as Appendix I). On the basis of the scores and considering the socio economic background of the pupils. 130 IX standard pupils from among 350 pupils were set apart and grouped into three. Then Ravens Progressive matrices and Kuppuswami's Socio-Economic Status Scale were administered to those 130 pupils to test them for their intelligence and socio economic status respectively. After scoring, four of them were exempted and the rest 126 were retained. Then the scores of IQ and Socio Economic Status were studied with respect to the groups. It showed that the groups as a whole is homogeneous. (Detailed in Chapter IV).

Among the three groups the first group (G1), second group (G2) and the third group (G3) were assigned to Mastery Learning Model Advance Organiser Model and Traditional Methods of teaching respectively.

After that the three groups were tested for their prerequisites for the present study. (Detailed in Chapter III under title prerequisites test) Almost all of them were having enough prerequisites. Those who were found lacking were given remedial teaching. Thus the group were made ready for the experiment.

The three groups were taught by the investigator in the normal classroom climate. Twenty four lessons on each model were prepared and taught through each

model. The duration of each teaching period was forty minutes. The investigator being the Malayalam teacher of the three classes she could utilise the model while teaching grammar portions with respect to each lesson.

The portions were covered according to the syllabus prescribed for IX standard Malayalam and the weightage was given to those particular grammar in teaching.

The time taken by each model for teaching each unit is given in table 3.20.

Table 3.20

Details of time taken by each model for teaching each unit

Sl.No.	Content	Time taken for treatment		
		MLM	AOM	TM
1.	Sabdam	9	9	9
2	Vibhakti	3	3	3
3.	Sandhi	4	4	4
4.	Samasam	2	2	2
5.	Anuprayogam	2	2	2
6.	Alankaram	3	3	3
7.	Vritam	1	1	1
	Total	24	24	24

The experimental procedure followed in Mastery Learning Model, Advance Organiser Model and Traditional Method are different. The experimental procedure is as given below.

Mastery Learning Model

After assigning the first group to Mastery Learning Model, their pre requisites for learning the content was tested. Those who were having difficulties were given remedial teaching.

During the treatment stage of Mastery Learning Model enough care was taken to get pupil accustomed to it. The strategies proposed for the models were employed while teaching each unit.

The content areas included in the study were seven unites. The investigator prepared lesson plans according to the time allotted for teaching. In every unit she has divided and handled classes in accordance with periods allotted. Altogether 24 lesson plans were prepared with seven units. The investigator also prepared the formative tests for each unit. She administered a test to Mastery Learning group after completion of each unit to evaluate the pupils performance. Level of mastery was fixed as 70%. The rest was grouped into 3. i.e. 60 and above M_1, 50 and above M_2, Below 50 M_3

Then the diagnostic tests were administered in order to diagnose the learning difficulties of group M1, M2 and M3. Then the remedial measures were taken. After remedial teaching re-evaluation was conducted. Diagnosis, remedial teaching and reevaluation were repeated till all of them acquired the desired level of mastery.

For corrective procedure in certain cases the investigator adopted individual guidance, obtained the help of Mastery group and Re-teaching procedure etc.

As soon as the mastery level was achieved by all the pupils on one unit, next unit was taken up for teaching. The investigator repeated the cycle of initial instruction, formative testing, diagnostic testing, individual correction and reevaluation unit by unit until all the units have been taught. After the completion of all the units, a standardised summative achievement test was administered. This was the final data collection stage. The data thus obtained were tabulated and analysed to find out the effectiveness of Mastery Learning Model (Analysis of the data is given in chapter IV).

Since the formative evaluation and diagnostic tests are integral part of Mastery Learning Model the details are given below:

Formative Test

Formative tests for each sub unit were prepared for evaluating the level of mastery attained by pupils after teaching and remedial teaching. With the help of these tests the masters and non masters were separated and the non masters were given remedial teaching. The masters were given enrichment programmes like reading materials, word games, etc. [Specimen given as Appendices VII (a1) & (a2)].

Diagnostic Test

Diagnostic tests were developed for using as a part of Mastery Learning Model of teaching. It helped the investigator to find out how much a student has not been able to achieve and why.

In this attempt the investigator found out the exact nature of the difficulties that might have led to deficiency in achievement. The co-workers also helped to associate these difficulties to specific reasons as educational, environmental or even psychological.

Since the diagnostic test was meant to find out the weakness in learning, time was not a controlling factor and marks were also not given. Diagnosis is an integral part of remedial teaching and thus that of mastery learning model of teaching [specimen gives as Appendices VII (c1) & (c2)].

Advance Organiser Model

The second experimental group (G2) was taught through Advance organiser model.

After identifying the group to be taught through advance organiser model they were tested for their prerequisites and remedial measures were taken.

The teaching followed the steps described by Joyce Bruce and Weil Marsha. In the first phase the presentation of the Advance Organiser for the lesson was done. The second phase in the model is the presentation of the learning task. It was done in the best way possible. It was followed by strengthening of the cognitive organisation as the third phase.

After completion of all the units taken for the study the standarrdised achievement test was administered to this group. This was the final data collection stage and data were tabulated and interpreted.

Traditional Method

The third group G3 was taught through traditional method. The teaching method which follows the Herbartian steps is here named as Traditional Method. For the third group also the same achievement test standardised by the investigator was administered to collect the final data. This was used for comparison in the study.

Details of the study is given in the table 3.21

Table 3.21

Details of the study

Sl. No.	Model	Group	Class	Pre-treatment stage	Treatment stage	Post-treatment stage	No. of pupils		No.of periods taught	No.of units taught	No.of lessons	
							Boys	Girls			Prose	Poem
1.	Mastery Learning	G 1	IX	Average of scholastic achievement '00-01 Intelligence Test, Measuring of Socio-Economic Status, Pre-requisite testing	Teaching through Mastery Learning, Formative Test, Diagnostic Test, Remedial Teaching	Testing for Achievement	20	22	24	7	4	1
2	Advance Organiser	G 2	IX	Average of scholastic achievement '00-01 Intelligence Test, Measuring of Socio-Economic Status, Pre-requisite testing	Teaching through Advance Organiser Model	Testing for Achievement	21	21	24	7	4	1
3	Tradition al Method	G3	IX	Intelligence Test, Measuring of Socio-Economic Status, Pre-requisite testing	Teaching using Harbartian Steps	Testing for Achievements	22	20	24	7	4	1

3.9. TREATMENT OF DATA AND STATISTICAL TECHNIQUES

The data have been carefully analysed by employing appropriate statistical techniques. The inferential statistical techniques such as 't' test, ANOVA, Leven's Statistics (LSD) have been employed to test various hypotheses. The graphical representations are also made to describe the distribution of scores. The obtained numerical results have been interpreted meaningfully. Detailed analysis of the data and discussion on the results are presented in Chapter IV (Final Test Scores given as Appendices X(a), (b) and (c).

The following are the statistical techniques employed.

1. Descriptive statistics such as mean and standard deviation.

2. Correlated t test for comparing the mean achievement scores on post test and to compare mean achievement scores group-wise.

3. Analysis of variance to compare the mean achievement scores of three groups.

4. Correlation coefficient between test scores and external criteria (for calculating the validity coefficient)

5. Correlation coefficient between the two sets of scores obtained on odd and even numbered items (for calculating reliability coefficient).

6. Statistical graphs – bar diagram, pie diagram. .

ANALYSIS AND INTERPRETATION OF DATA

C. Bhamini "Effectiveness of mastery learning strategy and advance organisers model over traditional methods for teaching Malayalam " Thesis. Department of Adult and Continuing Education and Extension services , University of Calicut, 2002

ANALYSIS AND INTERPRETATION OF DATA

ANALYSIS AND INTERPRETATION OF DATA

This chapter presents the analysis and interpretation of data regarding the effectiveness of Mastery Learning Model and Advance Organiser Model with Traditional Method of teaching. This chapter consists of 5 parts.

Section A:

Section A consists of the analysis of the test of homogeneity of the 3 groups, viz., Mastery Learning Group (G1), Advance Organiser Group (G2) and Traditional Method Group (G3) with respect to intelligence and Socio-Economic Status score.

Section B

This section deals with the comparison of the average scores of Mastery Learning Group (G1), Advance Organiser Group (G2) and Traditional Method Group (G3) with respect to total scores, instructional objectives and sex (each variable at a time among the three groups).

Section C

Section C deals with the comparison of Mean, Standard Deviation and t-value of Mastery Learning Group (G1), Advance Organiser Group (G2) and Traditional Method Group (G3) (taken two at a time) with respect to total scores and instructional objectives.

Section D

Section D consists of the comparison of Mean, Standard Deviation and t-value of boys as well as girls in Mastery Learning Group (G1), Advance Organiser Group

(G2) and Traditional Method Group (G3) taken two groups at a time with respect to total scores and instructional objectives.

Section E

Consists of the significant difference among the various objectives within the groups Mastery Learning Group (G1) and Advance Organiser Group (G2) taken separately.

Section F

Consists of the graphical representations of the data obtained.

SECTION A

This Section consists of the analysis of the test of homogeneity of the 3 groups viz., Mastery Learning Group (G1), Advance Organiser Group (G2) and Traditional Method Group (G3) with respect to intelligence and Socio-Economic Status score.

Test of Homogeneity of G1, G2 and G3

The ANOVA test was employed to compare the three groups at a time with respect to intelligence and SES. In ANOVA the total sum of squares at the sample may be analysed into groups of 2 or 3 or 4 or any number. The sum total is analysed into 2 parts. 1) Based upon 'within' group variation and (2) based upon variation between group means. From the last two values the population variance is estimated. To get the ratio between the 2 variables, divide the larger by the smaller variance. The answer is

the F ratio, which may/may not be significant at. 0.05 or 0.01 level. This is decided by going through the table value of F.

Table 4.1

Table showing the significance of the three groups G1, G2 and G3 with respect to Intelligence

Source	D.F.	Sum of square	Mean Square	F ratio	F Probability
Between group	2	3.349	1.67	0.013	.9862
Within groups	123	14834.69	120.60		
Total	125				

From the table the F ratio is 0.013 with df (2, 123). Since the p value (F probability) is greater than .05, the groups show no significant difference with respect to their mean score in the intelligence test.

Table 4.2.

95% Confidence Interval with respect to the Intelligence test scores

Group	No.	Mean	Std. Deviation	Std. Error	95% of C.I. for Mean
G1	42	32.57	10.96	1.69	29.155 to 35.98
G2	42	32.90	11.00	1.69	29.47 to 36.33
G3	42	32.92	10.97	1.69	29.50 to 36.34

The table shows that the 95% C.I. for G1 is 29.15 to 35.98 and for G2 29.47 to 36.33 and for G3 (29.50 to36.34). The F ratio is .0162 with df (2, 123).Since the p

value obtained is .9839 which is greater than .05, the groups show no significant difference with respect to their SES scores.

Table 4.3

95% Confidence Interval with respect to the SES scores

Group	No.	Mean	Std. Deviation	Std. Error	95% of C.I. for Mean
G1	42	9.80	7.82	1.20	7.3701 to 12.2489
G2	42	9.80	7.82	1.20	7.3701 to 12.2489
G3	42	9.54	7.40	1.14	7.2410 to 11.8543

The 95% C.I. for mean of the 3 groups are given by

For G1 (7.37 to 12.24)

For G2 (7.37 to 12.24)

For G3 (7.24 to 11.85)

While testing the homogeneity of variance using Levene Test, the P value obtained is 0.837 with df (2, 123)

Levenes Test	Df1	Df2	P value
0.1778	2	123	0.837

Levene statistics for homogeneity of variance shows that

Levenes Statistics	Df1	Df2	Significance
.0092	2	123	.991

The P value (.991) with df 2, 123 is greater than .05. This shows the variances are also not significant at .05 level, i.e. The variance are homogeneous. Thus the groups G1, G2, and G3 are homogeneous with respect to Intelligence.

Test of homogeneity and G1, G2 and G3 with respect to SES scores

Table 4.4

Table showing the significant difference of the three groups G1, G2 and G3 with respect to SES scores

Source	D.F.	Sum of square	Mean Square	F ratio	Significance
Between group	2	1.920	.960	.0162	.9839
Within groups	123	727135.	59.116		
Total	125	7273.27			

Since the p value is greater than 0.05 the variance are not significant at .05 level. Thus it can be concluded that the 3 groups are homogeneous with respect to socio economic status.

SECTION B

This section deals with the comparison of the average scores of Mastery Learning Group (G1), Advance Organiser Group (G2) and Traditional Method Group (G3) with respect to total scores, instructional objectives and sex. Since the test requires comparison of the 3 groups at a time, the ANOVA (Analysis of Variance) was employed with multiple range test (Least square difference method).

Standard Error of the difference between means in small sample (less than 30) was calculated by the formula

$$S.D = \sqrt{\frac{\sigma (X_1 - M_1)^2 + \sigma (X_2 - M_2)^2}{(N_1 - 1) + (N_2 - 1)}}$$

$$SED = SD \sqrt{\frac{N_1 + N_2}{N_1 \ N_2}}$$

Table 4.5

Table showing the significant difference among the three groups G1, G2 and G3 with respect to total scores

Source	D.F.	Sum of square	Mean Square	F ratio	P value
Between group	2	27344.61	13672.30	55.151	.000
Within groups	123	30492.30	247.90		
Total	125	57836.92			

The table shows that the F ratio is 55.151 with df (2,123).Since the p value is less than .0001, the average score of the 3 groups are highly significant with respect to total scores.

Table 4.6

95% Confidence Interval FOR MEAN with respect to total scores in G1, G2 and G3

Group	No.	Mean	Std. Deviation	Std. Error	95% of C.I. for Mean
G1	42	63.40	19.03	2.93	57.4717 to 69.3378
G2	42	59.95	15.58	2.40	55.0964 to 64.8089
G3	42	30.57	11.76	1.81	269054 to 34.2379

For group 1 ie. Mastery Learning Group, the 95% CI for mean is 57.47 to 69.33, for G2 ie. Advance Organiser Group it is 55.09 to 64.80 and for G3 ie. For Traditional Method Group it lies between 26.90 to34.23.

Then by using the multiple range test (Least square difference method) at 5% level, it is found that G3 is very poor compared to G1 and G2. Even though there is a slight increase in the average score of G1 it is not sadistically significant with G2.

Table 4.7

Table showing the significance of the three groups G1, G2 and G3 with respect to the variable Knowledge

Source	D.F.	Sum of square	Mean Square	F ratio	F value
Between group	2	677.761	338.881	9.4665	.0001
Within groups	123	4403.166	35.798		
Total	125	5080.928			

The table shows that the F ratio is 9.46 with df (2, 123). Since the p value is less than .05 the average scores of the 3 groups shows significant difference at .05 level.

Table 4.8

95% Confidence Interval for mean with respect to the Knowledge level among G1, G2 and G3

Group	No.	Mean	Std. Deviation	Std. Error	95% of C.I. for Mean
G1	42	23.57	6.212	.958	21.635 to 25.507
G2	42	22.97	5.470	.844	21.271 to 24.680
G3	42	18.38	6.235	.962	16.438 to 20.323

For group 1, the 95% CI for mean is 21.63 to 25.50, for g2 (21.27 to 24.68) and

for G3 it is (16.43 to 20.32). Then by using the multiple range test (LSD) method at

5% level it is found that G3 is very poor when compared to G1 and G2.Even though

there is slight increase in the average score of G1, it is not satisfactorily significant

with G2. That is G1 and G2 shows equal effectiveness with respect knowledge level.

Table 4.9

Table showing the significant difference of the three groups G1, G2 and G3 with
respect to the variable Understanding

Source	D.F.	Sum of square	Mean Square	F ratio	P value
Between group	2	8828.77	4414.38	47.934	.0000
Within groups	123	11327.38	92.092		
Total	125	20156.15			

The F ratio is 47.934 with df (2,123). Since the p value is less than .0001, the

average score of the 3 groups are highly significant with respect to understanding.

Table 4.10

95% Confidence Interval for men with respect to the Understanding among G1, G2
and G3

Group	No.	Mean	Std. Deviation	Std. Error	95% of C.I. for Mean
G1	42	26.07	12.93	1.995	22.042 to 30.1008
G2	42	23.30	9.77	1.5082	20.2637 to 26.3554
G3	42	7.09	3.68	0.568	5.9481 to 8.2429

The 95% CI for mean for group 1 lies within the range of 22.04 to 30.10 and for

G2 (20.26 to 26.35) and for G3 (5.94 to 8.24). Then by using the multiple range test

(LSD) method G3 ;is very poor at 5% level. There is slight increase in the average

score of G1, it is not satisfactorily significant with G2. That is G1 and G2 shows equal

effectiveness with respect to Understanding.

Table 4.11

Table showing the significant difference of among the three groups G1, G2 and G3
with respect to Application

Source	D.F.	Sum of square	Mean Square	F ratio	F Probability
Between group	2	2080.25	1040.12	179.03	.0000
Within groups	123	714.57	5.80		
Total	125	2794.82			

The he table reveals that the F value is 179.03 with df (2, 123).Since the p value

is less than .0001, the average score of 3groups are highly significant with respect to

Application.

Table 4.12

95% Confidence Interval for mean with respect to the Application among
G1, G2 and G3

Group	No.	Mean	Std. Deviation	Std. Error	95% of C.I. for Mean
G1	42	13.7619	2.314	0.357	13.04 to 14.48
G2	42	13.666	2.1261	0.328	13.00 to 14.32
G3	42	5.095	2.7480	0.424	4.23 to 5.95

The 95% CI for mean with respect to Application for

G1 13.0407 to 14.4831

G2 13.00 to 14.329

G3 4.238 to 5.951

The multiple range test, L.S.D. technique reveals that at 5% ;level G3 ;is very

poor when compared to G1 and G2. G1 is not satisfactorily significant with G2. That

is G1 and G2 shows equal effectiveness with respect to application.

Table 4.13

Table showing the significant difference among boys at G1, G2 and G3
with respect to Knowledge

Source	D.F.	Sum of square	Mean Square	F ratio	F Probability
Between group	2	561.99	280.99	8.500	.0006
Within groups	60	1983.27	33.05		
Total	62	2545.26			

The F ratio is 8.5 with df (2.60) which shows significant difference (since the P value less than .05) among the 3 groups with respect to knowledge

Table 4.14

95% Confidence Interval with respect to knowledge among boys of G1, G2, and G3

Group	No.	Mean	Std. Deviation	Std. Error	95% of C.I. for Mean
G1 (Boys)	20	23.55	6.09	1.36	20.69 to 26.40
G2 (Boys)	21	24.19	4.52	0.98	22.13 to 26.24
G3 (Boys)	22	17.63	6.42	1.37	14.78 to 20.48

The 95% of C.I for mean with respect to knowledge among boys at G1, G2 and G3 is for

G1 (20.69 to 26.40)

G2 (22.13 to 26.24)

G3 (14.78 to 20.48)

The multiple range test (LSD) method reveals that G3 is very poor at 5% level. Even though there is slight increase in the mean score of G2 boys it is not satisfactorily significant. That is G1 (Boys) and G2 (boys) show equal effectiveness with respect to Knowledge level.

Table 4.15

Table showing the significant difference among boys of the three groups G1, G2 and G3 with respect to Understanding

Source	D.F.	Sum of square	Mean Square	F ratio	F Probability
Between group	2	5586.26	2793.13	38.09	.0000
Within groups	60	4399.48	73.32		
Total	62	9985.74			

The F ratio is 38.09 at (2,60) d.f which stones high significant difference since the P value is less than .0001. That is the boys of the 3 pupils differ significantly with respect of understanding.

Table 4.16

95% Confidence Interval for mean with respect to Understanding among Boys of G1, G2 and G3

Group	No.	Mean	Std. Deviation	Std. Error	95% of C.I. for Mean
G1 (boys)	20	28.05	11.80	2.64	22.52 to 33.57
G2 (boys)	21	24.66	8.35	1.82	20.86 to 28.47
G3 (boys)	22	6.77	4.10	0.8752	4.95 to 8.5928

The 95% Confidence Interval for mean with respect to understanding for boys of G1 is 22-52 to 33.57

G2 (20.86 to 28.47) and for

G3 (4.95 to 8.59).

The Multiple range list LSD method reveals that at .05 level groups 3 is very poor when compared to G1 and G2. There is no satisfactory difference between G1 and G2 or they show equal effectiveness with respect to Understanding.

Table 4.17

Significant difference among boys of G1, G2 and G3 with respect to application

Source	D.F.	Sum of square	Mean Square	F ratio	P. value
Between group	2	1257.10	628.55	112.98	.0000
Within groups	60	333.78	5.563		
Total	62	1590.88			

The F ratio is 112-98 with d.f (2,60). Since the P value less than .0001 the groups shows high significant difference with respect to Application.

Table 4.18

95% Confidence Interval for mean with respect to Application among the boys of G1, G2 & G3

Group	No.	Mean	Std. Deviation	Std. Error	95% of C.I. for Mean
G1 (Boys)	20	14.20	1.90	0.426	13.30 TO 15.09
G2 (Boys)	21	13.90	2.09	0.457	12.95 to 14.85
G3 (Boys)	22	4.68	2.90	0.618	3.39 to 5.96

The 95% confidence interval for mean with respect of Application among boys of G1 is 13.3 to 15.09

For G2 12.95 to 4.85 and

For G3 (3.39 to 5.96).

The multiple range test (LSD method) reveals that the groups boys shows poor performance. When compared to G1 and G2. G1 boys and G2 boys show equal effectiveness with respect to Application even though the average score of G1 boys is 14.2 which is more among the three.

Table. 4.19

Significance difference among Girls of G1, G2 and G3 with respect to knowledge

Source	D.F.	Sum of square	Mean Square	F ratio	P. value
Between group	2	202.94	101.47	2.610	0.0818
Within groups	60	2332.32	38.87		
Total	62	2535.26			

The F ratio is 2.61 with d.f. (2,60). The groups show no significance difference with respect to knowledge. Since the P value is given for than .05.

Table 4.20

95 Confidence Internal for mean with respect to Knowledge among Girls of G1,G2 and G3

Group	No.	Mean	Std. Deviation	Std. Error	95% of C.I. for Mean
G1	22	23.59	6.45	1.37	20.72 to 26.45
G2	21	21.76	6.14	1.34	18.96 to 24.56
G3	20	19.20	6.07	1.35	16.35 to 22.04

The 95% Confidence Interval for mean with respect to Knowledge among the girls of G1, G2 and G3 is

For G1 (20.72 TO 26.45)

For G2 (18.96 to 24.56)

For G3 (16.35 to 22.04)

Table 4.21

Significance difference of girls among the groups G1, G2 and G3 with respect to Understanding

Source	D.F.	Sum of square	Mean Square	F ratio	P. value
Between group	2	3418.14	1709.07	15.313	.0000
Within groups	60	6696.26	111.60		
Total	62	10114.41			

The table shows that the F value is 15.313 with d.f (2,60). Since the P value is less than .0001, the groups show high significant difference with respect to understanding.

Table 4.22

95% Confidence Interval for mean with respect to Understanding among the girls of G1, G2 and G3.

Group	No.	Mean	Std. Deviation	Std. Error	95% of C.I. for Mean
G1	22	24.27	13.89	2.96	18.11 to 30.43
G2	21	21.95	11.05	2.41	15.92 to 26.98
G3	20	7.45	3.21	0.719	5.94 to 8.95

The 95% Confidence Interval for mean with respect Understanding among the girls of G1,G2 and G3 IS

For G1 (18.11 to 30.43)

For G2 (16.92 to 26.98)

For G3 (5.94 to 8.95)

Table 4.23

Significance difference among the girls of the 3 groups G1,G2 and G3 with respect to Application

Source	D.F.	Sum of square	Mean Square	F ratio	F Probability
Between group	2	840.24	420.12	69.40	.0000
Within groups	60	363.18	6.05		
Total	62	1203.42			

The F ratio obtained is 69.40 which shows high significant difference since the P value is less than .0001. That is the girls of the 3 groups difference significantly with respect to Application.

Table 4. 24

95% Confidence Interval for mean among the Girls of G1,G2 & G3 with respect to Application.

Group	No.	Mean	Std. Deviation	Std. Error	95% of C.I. for Mean
G1	22	13.36	2.61	.556	12.20 to 14.52
G2	21	13.42	2.18	.476	12.43 to 14.42
G3	20	5.55	2.56	.573	4.34 to 6.75

The 95% Confidence Interval for mean for G1 (Girls) with respect to Application is 12.20 to 14.52 and for

G2 Girls 12.43 to 14.42 and for

G3 Girls 4.34 to 6.75

SECTION C

This section deals with the comparison of Mean, Standard Deviation and t-value of Mastery Learning Group (G1), Advance Organiser Group (G2) and Traditional Method Group (G3) -- taken two at a time, with respect to, total scores and instructional objectives.

Table 4.25

Comparison of Mean, SD and t-value of Mastery Learning Group (G1) and Advance Organizer Group (G2) with respect to total scores

Variable	No.	Mean	SD	DF	SE of difference	T value	P value
G1 (Total score)	42	63.40	19.03	82	3.796	.91	.366
G2 (Total score)	42	59.95	15.58				

The table shows that $X_1 = 63.4$ and $X_2 = 59.95$

SE of the mean $= \sqrt{\dfrac{\sigma_1^2}{n_1}} = \sqrt{\dfrac{(19.03)^2}{42}}$

$= 2.93$

Similarly $= \sqrt{\dfrac{\sigma_2^2}{n_2}} = \sqrt{\dfrac{(15.58)^2}{42}} = 2.40$

SE of the difference or CR (Critical ratio) $= \sigma_D$

$\sigma_D = \sqrt{\dfrac{\sigma_1^2}{n_1} + \dfrac{\sigma_2^2}{n_2}}$

$= 3.796$

$t = \dfrac{\overline{X_1} -- \overline{X_2}}{\sigma_D} = \dfrac{63.4 -- 59.95}{3.796}$

$= .91$

The t value obtained is o.91 with d.f. 82. Which is not significant at 5% level of significance. Since the P value obtained is 0.366, which is greater than .05, it can be concluded that the 2 groups are not significant with respect to their total scores.

Table 4.26

Comparison of Mean, SD and t value of G1 and G2 with respect to 'Knowledge' level

Variable	No.	Mean	SD	DF	SE of difference	T value	P value
G1 (Total score)	42	23.57	6.21	82	1.277	0.47	0.642
G2 (Total score)	42	22.97	5.47				

The t value obtained is 0.47 with df 82 which is not significant at 5% level of significance. The P value (0.642) is greater than 0.05, so the groups G1 and G2 show no significant difference with respect to knowledge level.

Table 4.27

Comparison of Mean, SD and t value of G1 & G2 with respect to Understanding

Variable	No.	Mean	SD	DF	SE of difference	T value	P value
G1 (Understanding)	42	26.07	12.93	82	2.501	1.10	0.273
G2 (Understanding)	42	23.30	9.77				

The t value obtained is 1.10 with df 82 which is not significant at 5% level. The P value is 0.273 which is greater than 0.05, so the groups G1 & G2 show no significance difference with respect to Understanding.

Table 4.28

Comparison of Mean, SD and t value of G1 & G2 with respect to Application

Variable	No.	Mean	SD	DF	SE of difference	T value	P value
G1 (Application)	42	13.76	2.31	82	0.485	0.20	0.845
G2 (Application)	42	13.66	2.12				

The t value obtained is 0.20 with df 82 which is not significant at 5% level. Since the P value is 0.845 which is greater than 0.05, the groups show no significance difference with respect to Application.

Table 4.29

Comparison of Mean, SD and t value of G1 & G3 (Mastery Learning Group and Traditional Method Group) with respect to total scores

Variable Total scores	No.	Mean	SD	DF	SE of difference	T value	P value
G1 (Mastery Learning Group)	42	63.40	19.03	82	3.45	9.51	.000
G3 (Traditional Method. Group)	42	30.57	11.76				

The table shows that the t value obtained is 9.51 with df 82. Since the p value obtained is less than 0.0001 the groups show very high significant difference. The mean scores of the two groups G1 and G3 reveals that G1 is superior to G3 with respect to total scores.

Table 4.30

Comparison of mean, SD and t value of G1 and G3 with respect to Knowledge

Variable	No.	Mean	SD	DF	SE of difference	T value	P value
G1 (Knowledge)	42	23.57	6.21	82	1.358	3.82	.000
G3 (Knowledge)	42	18.38	6.23				

The t value is 3.82 which is highly significant at .01 level. Since the p value is less than 0.001 the groups G1 and G3 show high significant difference with respect to knowledge level. The mean score of G1 is superior to G3.

Table 4.31

Comparison of mean, SD and t value of G1 and G3 with respect to Understanding

Variable	No.	Mean	SD	DF	SE of difference	T value	P value
G1 (Understanding)	42	26.07	12.93	82	2.074	9.15	.000
G3 (Understanding)	42	7.09	3.68				

The t value is 9.15 which is highly significant at .01 level. Since the p value is less than 0.001 the groups G1 and G3 show high significant difference with respect to Understanding level. The mean score of G1 is much superior to G3.

Table 4.32

Comparison of mean, SD and t value of G1 and G3 with respect to Application

Variable	No.	Mean	SD	DF	SE of difference	T value	P value
G1 (Application)	42	13.76	2.31	82	0.554	15.63	.000
G3 (Application)	42	5.09	2.74				

The t value is 15.63 which is highly significant. Since the p value is less than 0.001. That means the groups show high significant difference with respect to Application. The mean score of G1 is superior to G3 with respect to application.

Table 4.33

Comparison of mean, SD and t value of G2 and G3 with respect to Total scores

Variable	No.	Mean	SD	DF	SE of difference	T value	P value
G2 (A.O. Model)	42	59.95	15.58	82	3.01	9.75	.000
G3 (T.M.)	42	30.57	11.76				

The t value obtained is 9.75 with df 82. Since the p value is(<0.001) the groups show very high significant difference.. The mean score of the groups reveal that G2 is superior to G3 ie. AO group is superior to TM group with respect to total scores.

Table 4.34

Comparison of mean, SD and t value of G2 and G3 with respect to Knowledge

Variable	No.	Mean	SD	DF	SE of difference	T value	P value
G2 (Knowledge)	42	22.97	5.47	82	1.28	3.59	.001
G3 (Knowledge)	42	18.38	6.23				

The t value obtained is 3.59 with df 82. Since the p value is less than 0.001 the groups show significant difference at 0.01 level. The mean score of the groups show that G2 is superior to G3 ie. The AO group is superior to Traditional Method group with respect to Knowledge

Table 4.35

Comparison of mean, SD and t value of G2 and G3 with respect to Understanding

Variable	No.	Mean	SD	DF	SE of difference	T value	P value
G2 (Understanding)	42	23.30	9.77	82	1.612	10.06	.000
G3 (Understanding)	42	7.09	3.68				

The t value obtained is 10.06 with df 82. Since the p value is(<0.001) the groups show very high significant difference with respect to understanding.. The mean score of the groups reveal that G2 is superior to G3i with respect to Understanding.

Table 4.36

Comparison of mean, SD and t value of G2 and G3 with respect to Application

Variable	No.	Mean	SD	DF	SE of difference	T value	P value
G2 (Application)	42	13.66	2.12	82	0.536	15.99	.000
G3 (Application)	42	5.09	2.74				

The t value obtained is 15.99 which is highly significant, since the p value is less than .0001. Also the mean scores of the groups reveal that G2 is superior to G3 with respect to application.

SECTION D

This section consists of the comparison of Mean, Standard Deviation and t-value of boys as well as girls in Mastery Learning Group (G1), Advance Organiser Group (G2) and Traditional Method Group (G3) taken two groups at a time with respect to total scores and instructional objectives.

Table 4.37

Mean, SD and t-value of the scores of boys in G1 and G2 with respect to total scores

Variables Total	No.	Mean	SD	Df	SE of difference	T value	P value
G1 Boys	20	65.80	17.82	39	4.90	0.62	0.539
G2 boys	21	62.76	13.38				

The t value (0.62) shows that boys of the 2 groups do not differ significantly with respect to total scores. Since the p value 0.539 greater than 0.05, the groups show no significant difference at 0.05 level. Even though there is no significant difference the mean score of the G1 boys shows slight superiority over g2 with respect to total scores.

Table 4.38

Comparison of mean, SD and t value of the scores of Boys in G1 and G2 with respect to Knowledge

Variable (Knowledge)	No.	Mean	SD	DF	SE of difference	T value	P value
G1 (Boys)	20	23.55	6.10	39	1.671	-.38	0.704
G2 (Boys)	21	24.19	4.52				

The t value (-.38) shows that the groups show no significant difference (since the p value greater than 0.05) Even though the groups show no significant difference the mean score of G1 groups is superior to G2 group with respect to Knowledge.

Table 4.39
Mean, SD and t-value of the scores of boys in G1 and G2 with respect to Understanding

Variables (Understanding)	No.	Mean	SD	Df	SE of difference	T value	P value
G1 Boys	20	28.05	11.80				
G2 boys	21	24.66	8.35	39	3.182	1.06	0.294

The t value is not significant (since the p value is greater than 0.05) at 0.05 level is the scores of G1 boys and G2 boys do not differ significantly with respect to understanding level. Even though there is no significance difference the mean score of the G1 boys show slight superiority over G2 (boys).

Table 4.40
Comparison of mean, SD and t value of G1 boys and G2 boys with respect to Application

Variable (Application)	No.	Mean	SD	DF	SE of difference	T value	P value
G1 Boys	20	14.20	1.90				
G2 Boys	21	13.90	2.09	39	0.627	0.47	0.640

The t value (0.47) is not significant (since the p value greater than 0.05) at .05 level. The scores of G1 boys and G2 boys do not differ significantly with respect to

application level. But the mean scores of G1 (boys) show slight superiority over G2 boys.

Table 4.41

Mean, SD and t-value of the scores of boys in G1 and G3 with respect to total scores

Variables (Total scores)	No.	Mean	SD	Df	SE of difference	T value	P value
G1 Boys	20	65.80	17.82	40	4.69	7.82	.0000
G3 boys	22	29.09	12.32				

The t value (7.82) shows that the boys of group 1 and group 3 show very high significant difference with respect to total scores (since the p value less than .0001. also the mean scores of the two groups reveals that G1(boys) show better performance than G3 boys with respect to total scores.

Table 4.42

Comparison of mean, SD and t value of G1 boys and G3 boys with respect to Knowledge

Variable (Application)	No.	Mean	SD	DF	SE of difference	T value	P value
G1 Boys	20	23.55	6.1	40	1.93	3.05	.004
G3 Boys	22	17.63	6.42				

The t value shows that the groups show significant difference with respect to knowledge. Since the p value < 0.05 the group show high significant difference. The mean scores of G1 boys show superiority over the scores of G3 boys.

Table 4.43

Mean, SD and t-value of the scores of boys in G1 and G3 with respect to understanding

Variables	No.	Mean	SD	Df	SE of difference	T value	P value
G1 Boys	20	28.05	11.80	40	2.67	7.95	.000
G3 boys	22	6.77	4.10				

The t value shows that the groups show significant difference with respect to understanding. Since the p value < .0001 the groups are highly significant.

Table 4.44

Comparison of mean, SD and t value of G1 boys and G3 boys with respect to Application

Variable (Application)	No.	Mean	SD	DF	SE of difference	T value	P value
G1 Boys	20	14.2	1.90	40	0.766	12.42	.000
G3 Boys	22	4.68	2.90				

The table shows that the t value is 12.42. Since P < .0001, the two groups show very high significant difference with respect to Application. The mean scores of the two groups show that G1(Boys) are superior to G3 (boys) with respect to Application.

Table 4.45

Mean, SD and t-value of the scores of boys in G2 and G3 with respect to total scores

Variables Total	No.	Mean	SD	Df	SE of difference	T value	P value
G2 Boys	21	62.76	13.38	41	3.921	8.59	.000
G3 boys	22	29.09	12.32				

The t value is is 8.59 which is significant at 0.001 level since the p value is less than (.0001) the group show very high significant difference. The mean scores reveal that the G2 boys are superior to G3 boys with respect to total scores.

Table 4.46

Comparison of mean, SD and t value of G2 boys and G3 boys with respect to Knowledge

Variable (Knowledge)	No.	Mean	SD	DF	SE of difference	T value	P value
G2 Boys	21	24.19	4.52	41	1.702	3.85	.0000
G3 Boys	22	17.63	6.42				

The t value is 3.85 which is highly significant. Since the p value (< 0.0001) is the boys of G2 group differ significantly with G3 (boys) in their level of cognition knowledge. The mean scores reveal that G2 group is superior to G3 group with respect to the boys' scores in Knowledge aspect.

Table 4.47

Mean, SD and t-value of the scores of boys in G2 and G3 with respect to
Understanding

Variables (Understanding)	No.	Mean	SD	Df	SE of difference	T value	P value
G2 Boys	21	24.66	8.35	41	1.993	8.98	.0000
G3 boys	22	6.77	4.10				

The table value reveals that the t value is 8.98. Since the p value is less than

.0001, the groups are highly significant. The mean scores reveal that G2 (boys) show

superiority over G3 (boys) with respect to understanding.

Table 4.48

Comparison of mean, SD and t value of G2 boys and G3 boys with respect to
Application

Variable Application	No.	Mean	SD	DF	SE of difference	T value	P value
G2 Boys	21	13.90	2.09	41	.775	11.90	.000
G3 Boys	22	4.68	12.90				

The t value shows that G2 (boys) and G3 (boys) differ significantly with respect

to Application. Since the p value less than .0001, the groups are highly significant. The

mean scores show that G2 (boys) show superiority over G3 (boys) with respect to

Application.

Table 4.49

Mean, SD and t-value of the scores of Girls in G1 and G2 with respect to total scores

Variables (Total scores)	No.	Mean	SD	Df	SE of difference	T value	P value
G1 Girls	22	61.22	20.24	41	5.766	0.71	0.483
G2 Girls	21	57.14	17.37				

The t value obtained is (0.71) and the p value obtained is 0.483. Since the p value greater than 0.05, the groups show no significant difference at 0.05 level. Even though there is no significant difference between the girls of the two groups, the average score of G1 (Girls) are much superior to G2 (girls) with respect to total scores.

Table 4.50

Comparison of mean, SD and t value of G1 Girls and G2 Girls with respect to Knowledge

Variable (Knowledge)	No.	Mean	SD	DF	SE of difference	T value	P value
G1 Girls	22	23.59	6.45	41	1.924	0.95	0.347
G2 Girls	21	21.76	6.14				

The t value obtained is 0.95 and the p value is 0.347. Since the p value is greater than 0.05, the girls of the 2 groups show no significant difference with respect to knowledge.

Table 4.51

Mean, SD and t-value of the scores of Girls in G1 and G2 with respect to
Understanding

Variables (Understanding)	No.	Mean	SD	Df	SE of difference	T value	P value
G1 Girls	22	24.27	13.89	41	3.841	0.60	0.549
G2 Girls	21	21.95	11.05				

The t value obtained is 0.60, and the p value is(0.549). Since the p value is greater than 0.05, the girls of the 2 groups show no significant difference with respect Understanding.

Table 4.52

Comparison of mean, SD and t value of G1 Girls and G2 Girls with respect to
Application

Variable (Application)	No.	Mean	SD	DF	SE of difference	T value	P value
G1 Girls	22	2.2	13.36	2.61	0.735	-.09	0.930
G2 Girls	21	21	13.42	2.18			

The table shows that the t value is not significant at both levels. Even though there is no SD the mean score of G1 (Girls) show slight superiority over G2 girls with respect Application.

Table 4.53

Mean, SD and t-value of Girls in G1 and G3 with respect to total scores Total scores

Variables	No.	Mean	SD	Df	SE of difference	T value	P value
G1 Girls	22	61.22	20.24	40	5.120	5.67	.000
G3 Girls	20	32.20	11.20				

The table shows that the t value obtained is .5.67 with df 40. Since the p value<.0001 the groups differ significantly in the girls of G1 show high significant different with respect to G3 girls in total scores. Also the average score of G1 (Girls) is much superior to G3 girls.

Table 4.54

Comparison of mean, SD and t value of G1 girls and G3 girls with respect to Knowledge

Variable (Knowledge)	No.	Mean	SD	DF	SE of difference	T value	P value
G1 Girls	22	23.59	6.45	40	1.94	2.26	.029
G3 Girls	20	19.20	6.07				

Since the p value obtained is <0.05 the groups show high significance (The t value obtained is 2.26). The mean score of G1 (Girls) is superior to the mean scores of (G3 Girls) with respect to Knowledge.

Table 4.55

Mean, SD and t-value of the scores of Girls in G1 and G3 with respect to
Understanding

Variable (Understanding)	No.	Mean	SD	Df	SE of difference	T value	P value
G1 Girls	22	24.27	13.89	40	3.186	5.28	.000
G3 Girls	20	7.45	3.22				

The t value obtained is 5.28 which is significant at 0.0001 level. Also the mean
score of G1 girls show superiority over G3 (Girls) with respect to Understanding.

Table 4.56

Comparison of mean, SD and t value of G1 Girls and G3 girls with respect to
Application

Variable (Application)	No.	Mean	SD	DF	SE of difference	T value	P value
G1 Girls	22	13.36	2.61	40	0.80	9.77	0.800
G3 Girls	20	5.55	2.56				

The table shows that the t value obtained is 9.77 with df 40. Since the p value is
greater than 0.05, girls of the 2 groups show no significant difference with respect to
level of cognition application.

Table 4.57

Mean, SD and t-value of the scores of Girls in G2 and G3 with respect to total scores

Variables (Total)	No.	Mean	SD	Df	SE of difference	T value	P value
G2 Girls	21	57.14	17.37	39	4.592	5.43	.0000
G3 Girls	20	32.20	11.20				

The t value obtained is 5.43 which is significant at ..0001 level. (The p value < .0001) the groups show high significance. The mean score of G2 (girls) is superior to G3 girls with respect to total scores.

Table 4.58

Comparison of mean, SD and t value of G2 girls and G3 girls with respect to Knowledge

Variable (Knowledge)	No.	Mean	SD	DF	SE of difference	T value	P value
G2 Girls	21	21.76	6.14	39	1.91	1.34	0.188
G3 girls	20	19.20	6.07				

The t value obtained is 1.34. Since the (p value > 0.05) the groups show no significant difference with respect to Knowledge scores. Even though there is no significant difference the average score of G2 girls is superior to G3 girls.

Table 4.59

Mean, SD and t-value of the scores of boys in G2 and G3 with respect to
Understanding

Variables (Understanding)	No.	Mean	SD	Df	SE of difference	T value	P value
G2 Girls1	21	21.95	11.05	39	2.57	5.64	.000
G3 Girls	20	7.45	3.22				

The t value shows that the girls of the two groups differ significantly at .0001
level. Since the (p value < 0.0001) the groups differ significantly and the average score
of G2 girls is superior to G3 girls with respect to Understanding.

Table 4.60

Comparison of mean, SD and t value of G2 girls and G3 girls with respect to
Application

Variable (Application)	No.	Mean	SD	DF	SE of difference	T value	P value
G2 Girls	21	13.42	2.18	39	0.742	10.61	.000
G3 Girls	20	5.55	2.56				

The t value shows that the girls of the groups G2 and G3 differ significantly at
.0001 level (since the p value < .0001). The group differ significantly. Also the mean
score of G2 girls is superior to G3 girls.

SECTION E

This section consists of the significant difference among the various objectives within the groups Mastery Learning Group (G1) and Advance Organiser Group (G2) taken separately.

Table 4.61

Significant difference among the various objectives (Knowledge, Understanding and Application) within group G1 (Mastery Learning)

Source	Df	Sum of squares	Mean squares	F ratio	F probability
Between groups	2	4524.7779	2262.389	22.4640	.0000
Within groups	123	12387.5461	100.7118		
Total	125	16912.3241			

The table shows that the F ratio is 22.464 with df (2, 123) Since the p value <.0001, the average scores of the 3 objectives show significant difference at .0001 level.

Table 4.62

95% CI for mean among the various objectives within the group G1

Group	No.	Mean	Std. Deviation	Std. Error	95% of C.I. for Mean
Knowledge	42	35.7129	9.4125	1.4524	32.77 to 38.64
Understanding	42	26.0714	12.9302	1.9952	22.04 to 30.1008
Application	42	40.4776	6.8081	1.0505	38.356 to 42.59

The 95% of CI for mean with respect to Knowledge objective in Group 1 is 32.77 to 38.64 and for Understanding it is 22.04 to 30.10 and for Application it ranges

from 38.35 to42.59. The multiple range test (LSD method) reveals that highest difference is between application and knowledge levels or knowledge scores show poor performance when compared to understanding and application.

Table 4.63

Significance among the various objectives (Knowledge, Understanding and Application) in Group 2 (ie. Advance Organiser Model)

Source	D.F.	Sum of square	Mean Square	F ratio	F Probability
Between group	2	6251.2029	3125.6015	46.1149	.0000
Within groups	123	8336.7590	67.7785		
Total	125	14587.9619			

The table reveals that the F ratio is 46.114 with df (2, 123). Since the p value < 0.0001 the average score of the 3 objectives show high significant difference.

Table 4.64

95% CI for mean among the various objectives (Knowledge, Understanding and Application) in group G2

Group	No.	Mean	Std. Deviation	Std. Error	95% of C.I. for Mean
Knowledge	42	34.8107	8.2876	1.2788	32.22 to 37.39
Understanding	42	23.3095	9.7743	1.5082	20.26 to 26.35
Application	42	40.1979	6.2542	0.9650	38.24 to 42.14

The 95% of CI for mean with respect to Knowledge objective in Group 2 is 32.22 to 37.39. With respect to Understanding is 20.26 to 26.35 and with respect to Application is 32.22 to 37.39.

The multiple range test (LSD method) reveals that there is significant difference at 0.05 level among the objectives knowledge, understanding and application levels. Understanding scores show poor performance when compared to Knowledge and Application. The highest difference is between Application and understanding scores.

Table 4.65

Significance among the various objectives (Knowledge, Understanding and Application) in Group 2 (ie. Advance Organiser Model)

Source	D.F.	Sum of square	Mean Square	F ratio	F Probability
Between group	2	6251.2024	3125.6015	46.1149	.0000
Within groups	123	8336.7590	67.7785		
Total	125	14587.961			

The table reveals that the F ratio is 46.114 with df (2, 123). Since the p value < 0.0001 the average score of the 3 objectives show high significant difference.

SECTION F

This section consists of the graphical representations of the data obtained

Figure 3

Diagramatical Representation of Mean Scores in Three Treatments

30.5714

63.4048

59.9524

Mastery Learning Model

Advance Organiser Model

Traditional Method
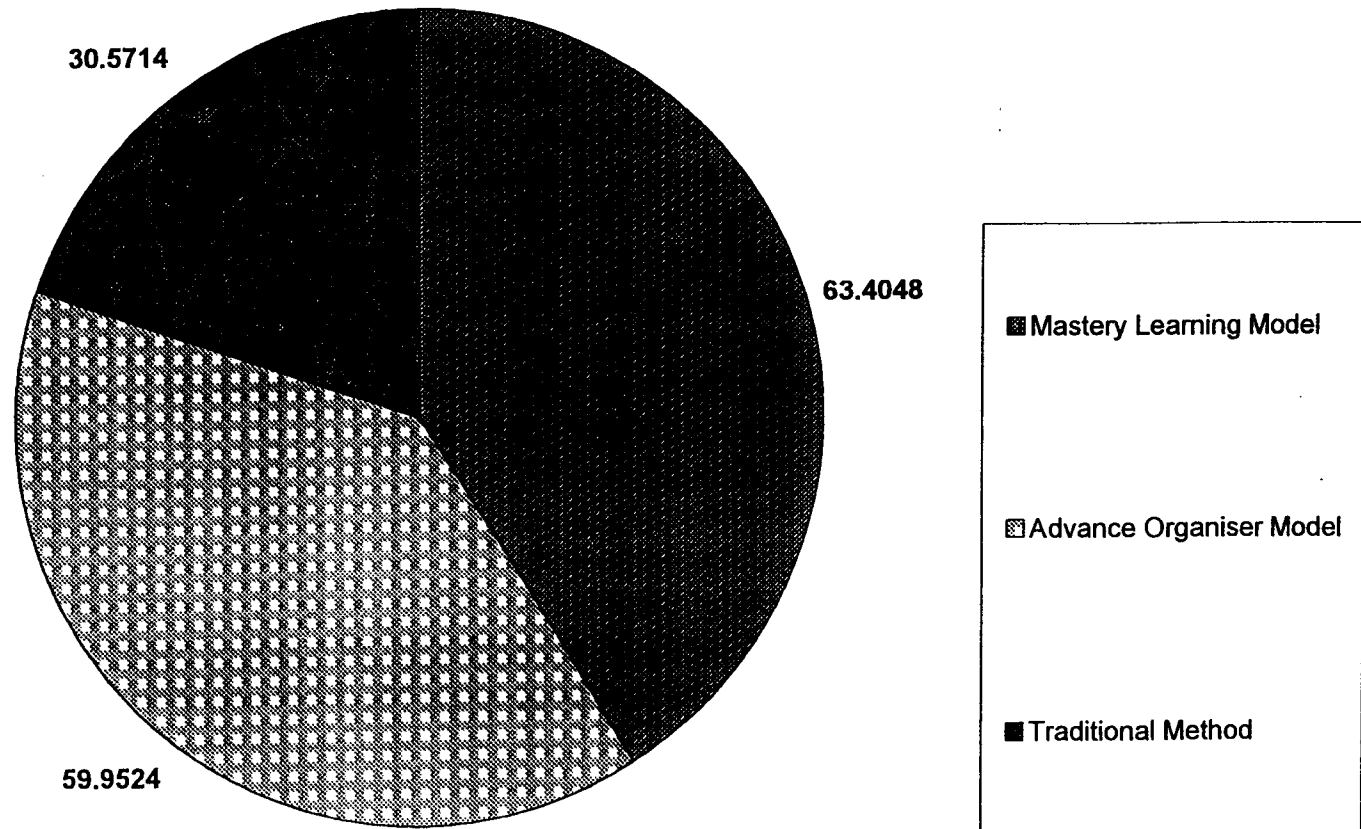
Figure 4

Graphical Representation of Three Levels of Cognition among Three Treatments
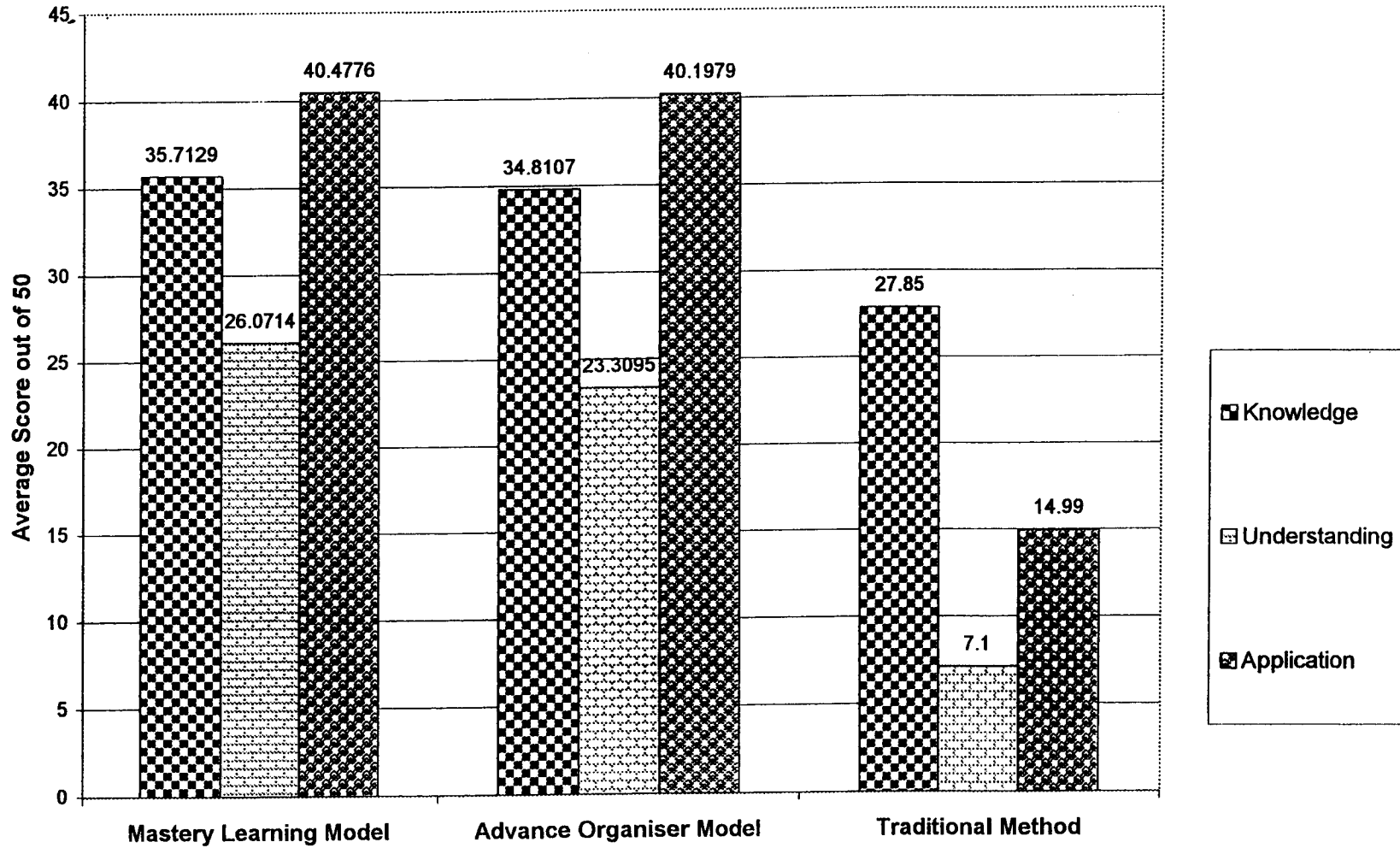
Figure 5

Graphical Representation of Three levels of Cognition in Mastery Learning Model (Sexwise)
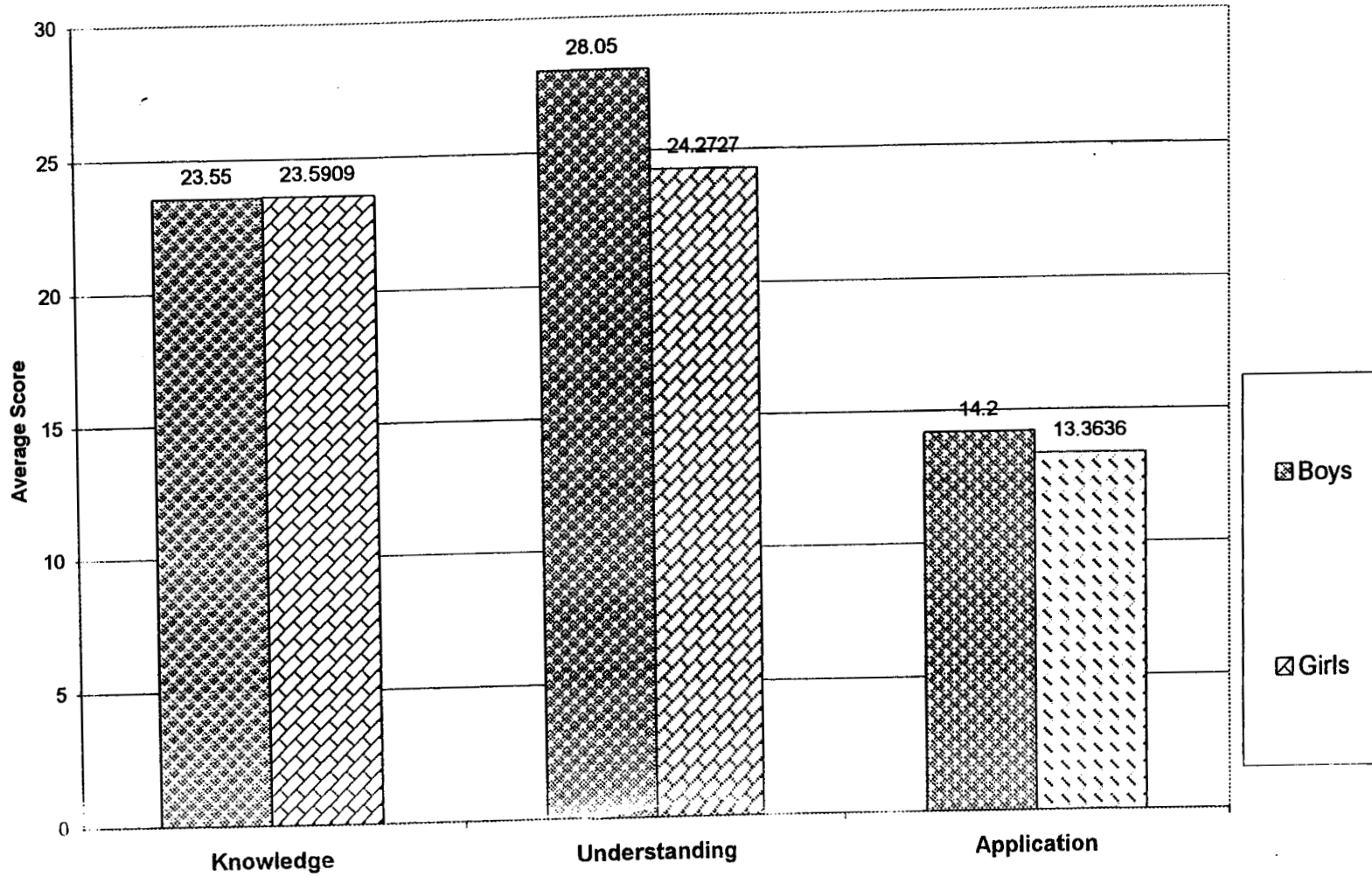
Figure 6

Graphical Representation of Three Levels of Cognition in Advance Organiser Model (Sexwise)
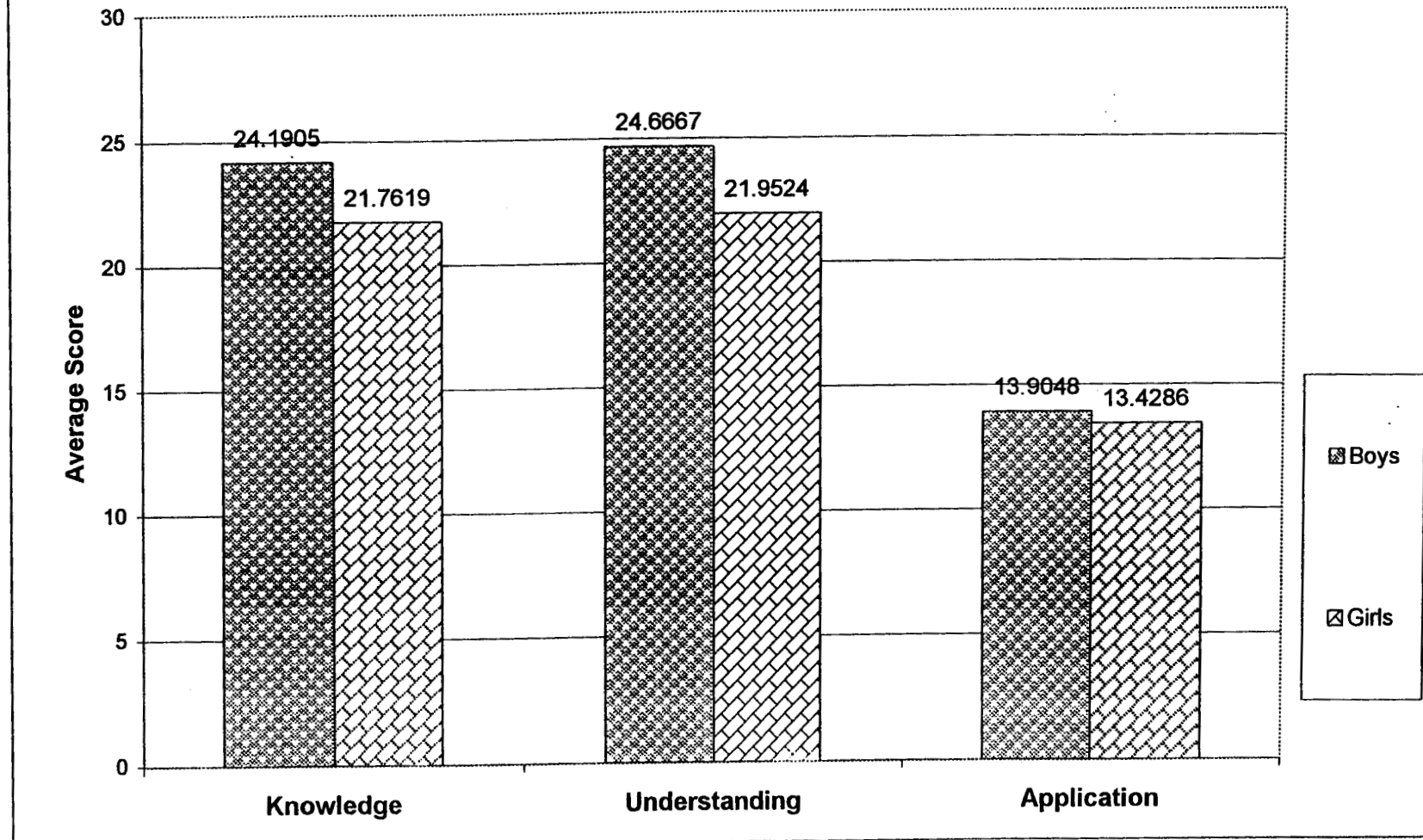
Figure 7

Graphical Representation of the Three Levels of Cognition in Traditional Method (Sexwise)
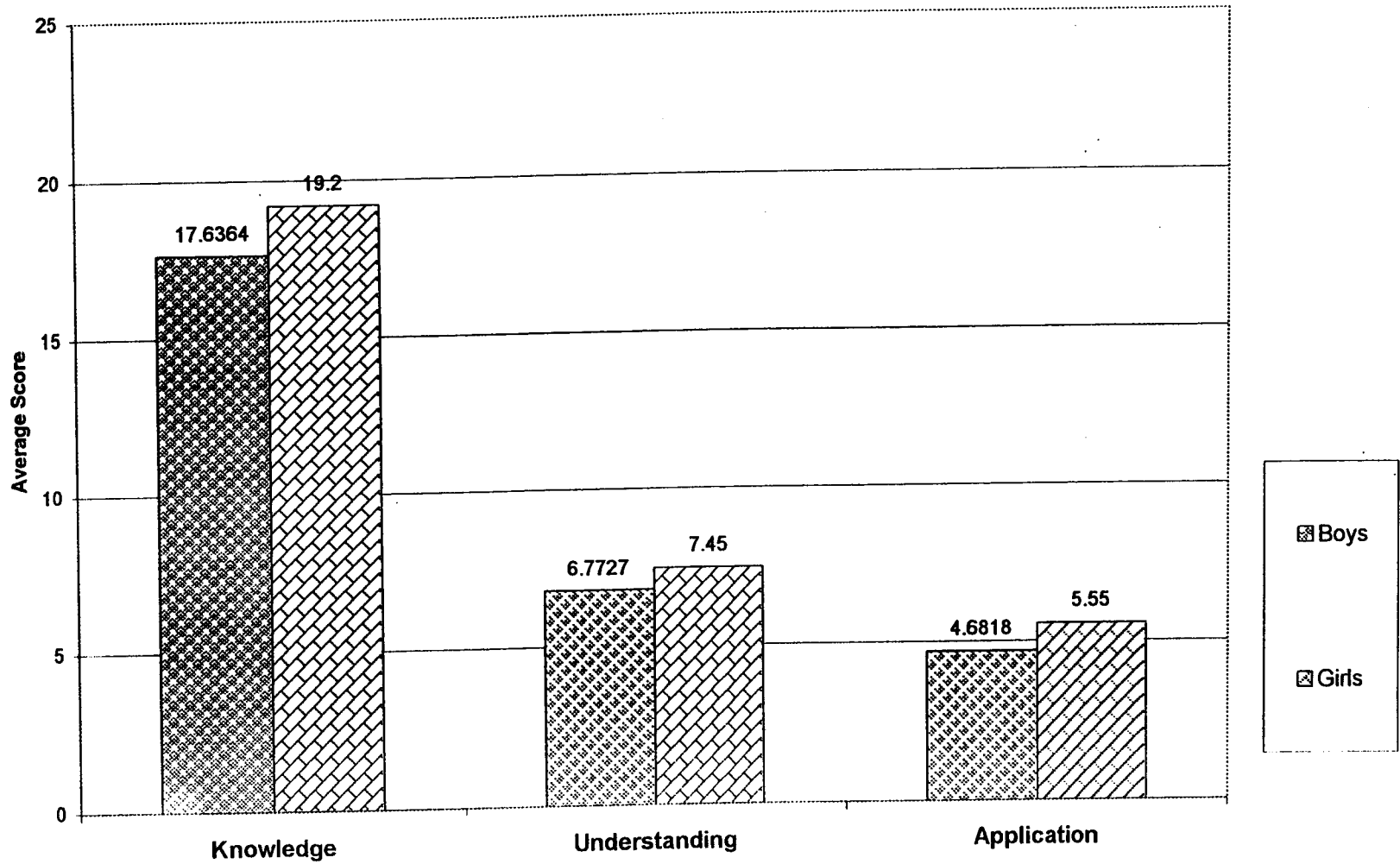
Figure 8

Graphical Representation of Total Scores in Three Treatments (Sexwise)
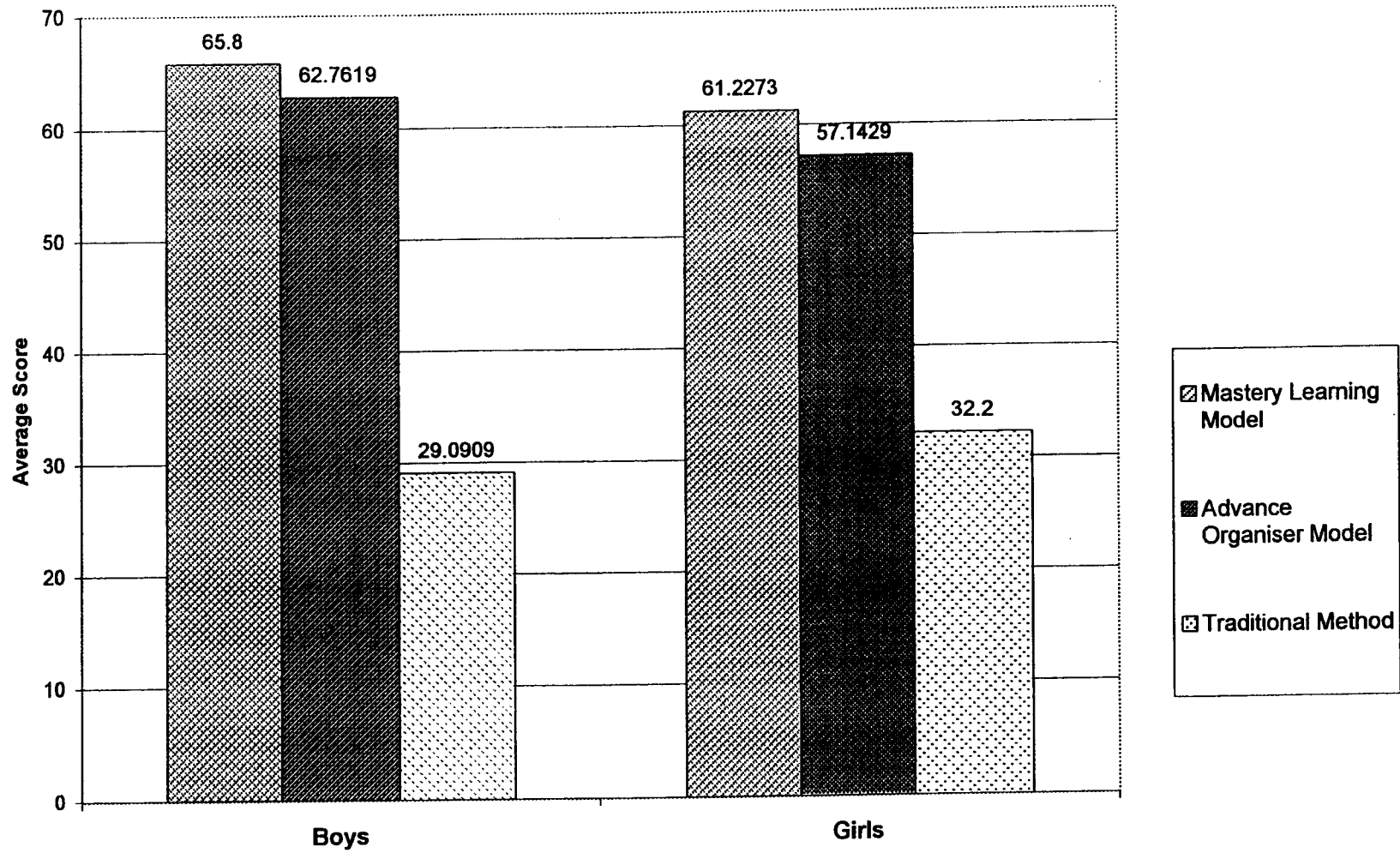
Consolidated Table 1

Consolidated table showing the significant difference at G1, G2 and G3 with respect to total scores, instructional objectives and sex.

Variables	Source	Sum of squares	Mean of Squares	F	Df	Level of significance 0.05
Total scores	Between Group	27344.61	13622.3	55.151	2, 123	Significant
	Within Group	30492.30	247.90			
Knowledge	Between Group	677.76	338.88	9.466	2, 123	Significant
	Within Group	4403.16	35.79			
Understanding	Between Group	8828.77	4414.38	47.93	2, 123	Significant
	Within Group	11327.38	92.09			
Application	Between Group	2080.25	1040.12	179.03	2, 123	Significant
	Within Group	714.57	5.80			
Boys with respect to Knowledge	Between Group	561.99	280.99	8.5	2, 60	Significant
	Within Group	1983.27	33.05			
Boys with respect to Understanding	Between Group	5586.26	2793.13	38.09	2, 60	Significant
	Within Group	4399.48	73.32			
Boys with respect to Application	Between Group	1257.10	628.55	112.98	2, 60	Significant
	Within Group	333.78	5.563			

Variables	Source	Sum of squares	Mean of Squares	F	Df	Level of significance 0.05
Girls with respect to Knowledge	Between Group	202.94	101.47	2.610	2, 60	Significant
	Within Group	2332.32	38.87			
Girls with respect to Understanding	Between Group	3418.14	1709.07	15.31	2, 60	Significant
	Within Group	6696.26	111.60			
Girls with respect to Application	Between Group	840.24	420.12	69.40	2, 60	Significant
	Within Group	363.18	6.05			

Consolidated table 1 reveals that the three groups differ significantly with respect to total scores, and instructional objectives. Similarly boys differ significantly in all the three groups with respect to instructional objectives and also the girls.

Consolidated Table II

Consolidated table showing the mean, SD and t value among the different groups (total scores, instructional objectives and comparison

Variables	No.	Mean	SD	SE of difference	T value	
Total Score (M.L) G1	42	63.40	19.03	3.79	.91	N.S
(A.O.) G2	42	59.95	15.58			
Knowledge G1	42	23.57	6.21	1.27	0.47	N.S
G2	42	22.97	5.47			

Understanding G1	42	26.07	12.93			
G2	42	23.3	9.77	2.50	1.10	N.S
Application G1	42	13.76	2.31			
G2	42	13.66	2.12	0.485	0.20	N.S
Total G1	42	63.40	19.03			
G3	42	30.57	11.76	3.45	9.5	Significant
Knowledge G1	42	23.57	6.21			
G3	42	18.38	6.23	1.358	3.82	Significant
Understanding G1	42	26.07	12.93			
G3	42	7.09	3.68	2.674	9.15	Significant
Application G1	42	13.76	2.31			
G3	42	5.09	2.74	0.55	15.63	Significant
Total G2	42	59.95	15.58			
G3	42	30.57	11.76	3.01	9.75	Significant
Knowledge G2	42	22.97	5.47			
G3	42	18.38	6.23	1.28	3.59	Significant
Understanding G2	42	23.30	9.77			
G3	42	7.09	3.68	1.612	10.06	Significant
Application G2	42	13.66	2.12			
G3	42	5.09	2.74	0.536	15.99	Significant

Consolidated table II reveals that the groups G1 and G2 do not differ significantly with respect to total scores or instructional objective-wise scores in the achievement test. But the groupsG1 and G3 show high significant difference in all the aspects of instructional objectives and total scores as well as the groups G2 and G3.

Consolidated Table III

Sex-wise comparison of G`1, G2, and G3 with respect to total scores and Instructional objectives (Boys)

Variables (Boys)	No.	Mean	SD	SE of difference	T value	Level of significance 0.05
Total Score G1	20	65.80	17.82			
G2	21	62.76	13.38	4.90	0.62	N.S
Knowledge G1	20	23.55	6.10			
G2	21	24.19	4.52	1.67	--.38	N.S
Understanding G1	20	28.05	11.80			
G2	21	24.66	8.35	3.182	1.06	N.S
Application G1	20	14.20	1.90			
G2	21	13.90	2.09	9.627	0.47	N.S
Total G1	20	65.80	17.82			
G3	22	29.09	12.32	4.69	7.82	Significant
Knowledge G1	20	23.55	6.1			
G3	22	17.63	6.42	1.93	3.05	Significant

Variables (Boys)	No.	Mean	SD	SE of difference	T value	Level of significance 0.05
Understanding G1	20	28.05	11.8	2.67	7.95	Significant
G3	22	6.77	4.10			
Application G1	20	14.2	1.90	0.766	12.42	Significant
G3	22	4.68	2.90			
Total G2	21	62.76	13.38	3.921	8.59	Significant
G3	22	29.09	12.32			
Knowledge G2	21	24.19	4.52	1.70	3.85	Significant
G3	22	17.63	6.42			
Understanding G2	21	24.66	8.35	1.993	8.98	Significant
G3	22	6.77	4.10			
Application G2	21	13.90	2.09	0.775	11.90	Significant
G3	22	4.68	12.90			

Consolidated table III reveals that boys of G1 and G2 do not differ significantly with respect to overall and instructional objective-wise scores. Whereas boys of G`1 and G3 show very high significant difference with respect to total scores and instructional objectives as well as the boys of G2 and G3.

Consolidated Table IV

Sex-wise comparison of G`1, G2, and G3 with respect to total scores and Instructional objectives (Girls)

Variables (Girls)	No.	Mean	SD	SE of difference	T value	
Total Score G1	22	61.22	20.24			
				5.766	0.71	Not significant
G2	21	57.14	17.37			
Knowledge G1	22	23.59	6.45			
				1.92	0.95	Not significant
G2	21	21.76	6.14			
Understanding G1	22	24.27	13.89			
				3.84	0.60	Not significant
G2	21	21.95	11.05			
Application G1	22	13.36	2.61			
				0.735	-.09	Not significant
G2	21	13.42	2.18			
Total G1	22	61.22	20.24			
				5.12	5.67	Significant
G3	20	32.20	11.20			
Knowledge G1	22	23.59	6.45			
				1.94	2.26	Significant
G3	20	19.20	6.07			
Understanding G1	22	24.27	13.89			
				3.18	5.28	Significant
G3	20	7.45	3.22			
Application G1	22	13.36	2.61			
				0.80	9.77	Significant
G3	20	5.55	2.56			

Variables (Girls)	No.	Mean	SD	SE of difference	T value	
Total G2	21	57.14	17.37	4.59	5.43	Significant
G3	20	32.20	11.20			
Knowledge G2	21	21.76	6.14	1.91	1.34	N.S
G3	20	19.20	6.07			
Understanding G2	21	21.95	11.05	2.57	5.64	Significant
G3	20	7.45	3.22			
Application G2	21	13.42	2.18	0.74	10.61	Significant
G3	20	5.55	2.56			

The table reveals that boys of G1 and G2 do not differ significantly with respect to their total scores or instructional objective-wise scores in the Achievement test. But the girls of G1 and G3 show very high significant difference in all aspects of total scores and instructional objectives where as the girls of G2 and G3 show significant difference with respect to total scores and instructional objectives except in knowledge scores. At Knowledge levels the girls of G2 and G3 do not show any significant difference as in other instructional objectives.

Consolidated Table V

Significant difference among various objectives (Knowledge, Understanding and Application) in G`1 and G2

Variables	Source	Su of squares	Mean squares	F	Df	
G1 (ML group)	Between group	4524.77	2262.38	22.46	(2, 123)	Significant
	Within group	12387.59	100.711			
G2 (AO group)	Between group	6251.20	3125.6	46.114	(2,123)	Significant
	Within group	8336.75	67.77			

The table reveals that the groups G1 and G2 when taken separately differ significantly with respect to their scores in Knowledge, Understanding and application.

CONCLUSION

Considering all the above tables it is evident that the experimental and control groups differ significantly with respect to total scores and instructional objective-wise scores in the achievement test. While the groups are homogenous in all aspects like intelligence, socio-economic status etc. it is evident that this difference is due to the experimental treatments i.e., due to the effectiveness of Mastery Learning Model and Advance Organiser Model of teaching.

CONCLUSIONS SUGGESTIONS AND RECOMMENDATIONS

CONCLUSIONS, SUGGESTIONS AND
RECOMMENDATIONS

CONCLUSIONS SUGGESTIONS AND RECOMMENDATIONS

The study as mentioned earlier as an attempt to find out whether Mastery Learning Model and Advance Organiser Model has got advantages over Traditional Methods for teaching Malayalam.

This chapter provides an overview of the significant aspects of the stages of conducting the study, the notable findings, their educational implications and suggestions for further research regarding this area.

5.1 RESATEMENT OF THE PROBLEM

"Effectiveness of Mastery Learning Strategy and Advance Organisers Model over Traditional Methods for teaching Malayalam".

5.2 VARIABLES OF THE STUDY

There were three types of variables in the study namely independent variables, depended variables and controlled variables.

5.2.1 Independent variables

Mastery learning model

Advance organiser model

Traditional Method.

5.2.2 Dependent variable

Achievement in Malayalam

5.2.3 Controlled variables

Class of students (IX standard)

Subject taught (selected topics of Malayalam)

Intelligence of pupils

Socio economic status of pupils

School and pupils taken for the study.

5.3 OBJECTIVES

1. To make a comparison of the effects of Mastery Learning Model, Advance Organizer Model Traditional Methods on the Achievement of Secondary school pupils in Malayalam.

2. To compare the effect of Mastery Learning Model and Traditional Method on pupils achievement in Malayalam.

3. To compare the effect of Advance organiser model and Traditional Method on pupils achievement in Malayalam.

4. To compare the effect of Mastery Learning Model and Advance Organizer Model on Pupils Achievement in Malayalam.

5. To test whether significant difference in the mean achievement scores in Malayalam exists among pupils taught through Mastery Learning Model, Advance Organiser Model and those who taught through Traditional Method of Teaching with reference to Knowledge, Understanding and Application levels.

5.4 HYPOTHESES

1. There will be no significant difference in the attainment of Malayalam taught in the Mastery Learning Model, Advance Organiser Model and Traditional Method.

2. There will be no significant difference in the attainment in Malayalam language taught in the Mastery Learning Model and Traditional Method.

3. There will be no significant difference in the attainment in Malayalam language taught in the Advance Organizer Model and Traditional Method.

4. There will be no significant difference in the attainment of Malayalam Language taught in the Mastery Learning Model and Advance Organiser Model.

5. If the effects of the 3 strategies of instruction studied are studied separately with respect to the 3 major objectives of Languages, namely knowledge, understanding and application. There will be no significant difference in the levels of attainment.

5.5 METHODOLOGY OF THE STUDY

The present study was conducted to test the effectiveness of Mastery Learning and Advance Organizer Model over Traditional Methods for teaching Malayalam in Secondary school level.

Broadly stating, the study was completed in three stages. They are Controlling stage, Treatment stage and Post treatment stage.

In Controlling stage the pupils were divided into three groups in terms of scholastic achievement, intelligence and SES. Then the groups were tested for their pre-requisites. Remedial teaching was done for the needy pupils. This was completed during June 2001.

The second stage was Treatment stage. This was spread over a period of four months i.e. from 2001 July 2 to 2001 November 5. The three groups were taught, seven units of IX standard Malayalam Grammar with the three teaching models viz. Mastery Learning Model, Advance Organizer Model and Traditional Method.

After the treatment, the three groups were tested, for their achievement, using a standardized achievement test, developed by the investigator

5.5.1 Sample

The sample of the study was 126 IX standard pupils drawn from Beypore Govt. Higher Secondary School, Kozhikode in Kerala State.

5.5.2 Tools employed

1. Intelligence test. (Raven's Standard Progressive Matrices)

2. SES scale (Developed by Kuppu Swami and modified by Pillai 1973 and Subramaniyadas 1996)

3. A pre-requisite test in Malayalam

(Items selected on the basis of contents taken for the study)

4. Lesson plans for Mastery Learning Model

5. Lesson Plans for Advance Organizer Model

6. Lesson Plans for Traditional Method

7. Achievement test in Malayalam (constructed and standardised by the investigator)

5.5.3 Techniques of data Collection

Proper care should be taken to collect relevant data for getting availed result for any study. The investigator took absolute care for the data collection of the present study. In the Controlling stage the previous year scholastic achievement scores, I.Q. test SES scores and pre-requisites tests were utilized.

For the Treatment stage, the classes on the Model taken for the study, was conducted by the investigator herself. Adequate care was taken while preparing the lesson plans.

For the final stage the standardized achievement test in Malayalam was utilized. It was the final data collection stage.

5.5.5 Treatment of Data and Statistical Technique

The data have been carefully analysed by employing appropriate statistical techniques. The inferential statistical techniques such as 't' test, ANOVA, Leven's Statistics (LSD) have been employed to test various hypotheses. The graphical representations are also made to describe the distribution of scores. The obtained numerical results have been interpreted meaningfully.

Descriptive Statistics such as mean and standard deviation, Correlated and test, Analysis of variance, Correlation coefficient for calculating validity, and reliability, bar diagram and pie diagram for graphical representations were used.

5.6 MAJOR FINDINGS

1. The experimental group (G1) taught through Mastery Learning Model scored higher than Traditional Method with respect to total scores and at all levels of three instructional objectives namely Knowledge, Understanding and Application.

2. The Experimental group(G2) taught through Advance Organiser Model scored higher than Traditional Method with respect to total scores and at all levels of three instructional objectives namely Knowledge, Understanding and Application.

3. The Experimental group (G3) taught through Mastery Learning Model and the Experiment group taught the Advance Orgniser Model G2 do not differ significantly with respect to total scores and at all levels of cognition namely Knowledge, Understanding and Application.

4. Sex difference do not have significance among the whole sample in over all scores, at all the three levels of Instructional objectives namely Knowledge, Understanding and Application.

   Conclusion regarding this is that, the boys and the girls fared equally good in Mastery Learning Model, Advance Organiser Model and Traditional Method.

separately at all levels of Knowledge, Understanding and Application and with respect to total scores.

5. There is significant difference, among the same sex pupils, taught through experimental and control procedures, with respect to total scores and in terms of hierarchy of levels of cognition, namely Knowledge, Understanding and Application.

6. There is no significant difference between the same sex pupils taught through two experimental procedures namely Mastery Learning Model and Advance Organiser Model.

7. The experimental and control groups differ significantly with respect to over all scores, and at all the three levels of, instructional objectives namely Knowledge, Understanding and Application.

5.7 TENABILITY OF HYPOTHESES

Based on the findings, tenability of the hypotheses, set for the study were considered.

Hypothesis (1) states that "There will be no significant difference in the attainment of Malayalam taught in the Mastery Learning Model, Advance Organiser Model and Traditional Method." The hypothesis has been rejected on the basis of results obtained in the experimental groups (G1 and G2) namely Mastery Learning Model, Advance Organiser Model respectively; with respect to total scores and at the

three levels of instructional objective, namely knowledge, understanding and application than the control group (G3) the Traditional Method.

Hypothesis (2) states that "There will be no significant difference in the attainment in Malayalam language, taught in the Mastery Learning Model and Traditional Method." This hypothesis is fully rejected because, the scores of experimental group G1 taught through Mastery Learning shows, very high significant difference with respect to overall and at all the three levels of Instructional objectives namely Knowledge, Understanding and Application when compared with the Traditional Method group G3.

Hypothesis (3) states that "there will be no significant difference in the attainment in Malayalam language, taught in the Advance Organiser Model and Traditional Method.:" This hypothesis is fully rejected because, the experimental group taught through Advance Organiser Model shows, very high significant difference with respect to overall and at all the three levels of instructional objectives namely Knowledge, Understanding and Application.

Hypothesis 4 states that "there will be no significant difference in the attainment of Malayalam language taught, in the Mastery Learning Model and Advance Organiser Model." This hypothesis is fully substantiated. No significant relationship has been seen, between, the achievement of pupils taught through Mastery Learning Model and Advance Organiser Model, with respect to overall performance and the three levels of cognition. Even though there is slight increase in mean scores

in Mastery Learning Model Group, it is not statistically significant which is depicted in graph... That means both the models are equally effective for teaching Malayalam.

Hypothesis (5) states that "if the three strategies of instruction are studied separately, with respect to the three objectives of language, namely, Knowledge, Understanding and Application, there will be no significant difference in the levels of attainment." This hypothesis is partially accepted. When compared the effectiveness of Mastery Learning Model, Advance Organiser Model with Traditional Method, the scores obtained by Mastery Learning Model and Advance Organiser Model group is superior in all the three levels of cognition namely, Knowledge, Understanding and Application. The comparison between Mastery Learning Model and Advance Organiser Model revealed that both these models are equally effective, with respect to total scores and at the three levels of cognition. There is slight increase with respect to Application level in Mastery Learning Model which is not statistically significant. It is depicted in the graph.

5.8 EDUCATIONAL IMPLICATIONS

It is of utmost importance to review the results of the present investigator at the point of improving the prevailing educational practices in Malayalam instruction.

Since the present study has proved beyond doubt, the supremacy of the Mastery Learning Model and Advance Organiser Model, it is worthwhile to recommend these models for the teaching of Malayalam. The study reveals that, the teachers can adopt these models in ordinary classroom situations for teaching Malayalam with markedly

greater interest of pupils. The greater achievement through these models provide motivation for further learning and noted as a powerful source of mental health.

Analysis of the result showed that with respect to overall scores and at the level of application, Mastery learning Model is more effective when compared with Advance Organiser Model. But it is not statistically significant.

In sex-wise comparison also both the Models, Mastery Learning Model and Advance Organiser Model proved to be effective irrespective of sex difference.

Now-a-days the models of teaching are being alienated from our classrooms because of the lack of awareness regarding the techniques and also because of the belief that these models are time consuming and not suitable to our class room situations. The investigation highlights the importance and feasibility of the models as in an ideal method for teaching learning process. For this the teachers should have thorough awareness about the techniques and should have the positive attitude and willingness to apply the models in the class rooms, when only they can contribute much towards the effective teaching learning process in Malayalam especially in grammar.

5.9. SUGGESTIONS FOR FURTHER RESEARCH

The findings of the study open up a few areas for further investigation.

The investigator revealed that Mastery Learning Model and Advance Organiser Model are more effective than Traditional Method for teaching Malayalam. Here an

attempt was made to compare, the effectiveness of Mastery Learning Model belonging to behavioural systems family and Advance Organiser Model belonging to information processing family with the Traditional method. The study suggests the need to conduct a series of studies that will complete the perspective covered by the present study.

1. The studies similar to the present one can be replicated with larger sample without restriction of units.

2. Study of the relative effectiveness of different models of teaching, belonging to different families with traditional methods should be undertaken.

3. Similar studies can be extended covering a cross section of units taught over a considerable period of time.

4. A study of the relative effectiveness of integration of different models in the same classroom over a considerable period of time will be of great use.

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APPENDIX I

AVERAGE OF FIRST QUARTERLY, SECOND QUARTERLY AND ANNUAL
EXAMINATION SCORES 2000-2001 – GROUP WISE
(USED FOR GROUPING) (MARKS OUT OF 600)

MLM Group (G1)				AOM Group (G2)				T M GROUP (G3)			
Sl. No.	Mark	Sl. No.	Mark	Sl. No.	Mark	Sl. No.	Mark	Sl. No.	Mark	Sl. No.	Mark
1	134	22	215	1	72	22	412	1	504	22	83
2	476	23	329	2	265	23	215	2	134	23	334
3	188	24	275	3	231	24	158	3	527	24	210
4	375	25	76	4	137	25	469	4	195	25	284
5	148	26	394	5	383	26	208	5	307	26	157
6	529	27	225	6	284	27	335	6	75	27	384
7	211	28	337	7	152	28	165	7	475	28	237
8	70	29	169	8	520	29	538	8	252	29	355
9	262	30	535	9	277	30	206	9	189	30	164
10	254	31	238	10	80	31	267	10	263	31	207
11	145	32	286	11	190	32	174	11	275	32	297
12	281	33	351	12	309	33	354	12	139	33	227
13	224	34	171	13	161	34	217	13	209	34	340
14	198	35	347	14	191	35	278	14	326	35	176
15	265	36	92	15	325	36	146	15	161	36	372
16	142	37	217	16	92	37	348	16	417	37	238
17	311	38	295	17	254	38	235	17	261	38	279
18	202	39	105	18	296	39	390	18	147	39	91
19	385	40	232	19	141	40	284	19	277	40	286
20	152	41	415	20	370	41	170	20	208	41	225
21	271	42	175	21	245	42	209	21	357	42	145

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RAVEN'S PROGRESSIVE MATRICES TEST

ANSWER SHEET

Name:

Standard

PART—A							PART—B							PART—C							
	1	2	3	4	5	6		1	2	3	4	5	6		1	2	3	4	5	6	7	8
A1	O	O	O	O	O	O	B1	O	O	O	O	O	O	C1	O	O	O	O	O	O	O	O
A2	O	O	O	O	O	O	B2	O	O	O	O	O	O	C2	O	O	O	O	O	O	O	O
A3	O	O	O	O	O	O	B3	O	O	O	O	O	O	C3	O	O	O	O	O	O	O	O
A4	O	O	O	O	O	O	B4	O	O	O	O	O	O	C4	O	O	O	O	O	O	O	O
A5	O	O	O	O	O	O	B5	O	O	O	O	O	O	C5	O	O	O	O	O	O	O	O
A6	O	O	O	O	O	O	B6	O	O	O	O	O	O	C6	O	O	O	O	O	O	O	O
A7	O	O	O	O	O	O	B7	O	O	O	O	O	O	C7	O	O	O	O	O	O	O	O
A8	O	O	O	O	O	O	B8	O	O	O	O	O	O	C8	O	O	O	O	O	O	O	O
A9	O	O	O	O	O	O	B9	O	O	O	O	O	O	C9	O	O	O	O	O	O	O	O
A10	O	O	O	O	O	O	B10	O	O	O	O	O	O	C10	O	O	O	O	O	O	O	O
A11	O	O	O	O	O	O	B11	O	O	O	O	O	O	C11	O	O	O	O	O	O	O	O
A12	O	O	O	O	O	O	B12	O	O	O	O	O	O	C12	O	O	O	O	O	O	O	O

PART—D									PART—E								
	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8
D1	O	O	O	O	O	O	O	O	E1	O	O	O	O	O	O	O	O
D2	O	O	O	O	O	O	O	O	E2	O	O	O	O	O	O	O	O
D3	O	O	O	O	O	O	O	O	E3	O	O	O	O	O	O	O	O
D4	O	O	O	O	O	O	O	O	E4	O	O	O	O	O	O	O	O
D5	O	O	O	O	O	O	O	O	E5	O	O	O	O	O	O	O	O
D6	O	O	O	O	O	O	O	O	E6	O	O	O	O	O	O	O	O
D7	O	O	O	O	O	O	O	O	E7	O	O	O	O	O	O	O	O
D8	O	O	O	O	O	O	O	O	E8	O	O	O	O	O	O	O	O
D9	O	O	O	O	O	O	O	O	E9	O	O	O	O	O	O	O	O
D10	O	O	O	O	O	O	O	O	E10	O	O	O	O	O	O	O	O
D11	O	O	O	O	O	O	O	O	E11	O	O	O	O	O	O	O	O
D12	O	O	O	O	O	O	O	O	E12	O	O	O	O	O	O	O	O

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APPENDIX II (b)

SCORING KEY STANDARD PROGRESIVE MATRICES

SETS A,B,C,D & E

No.	Set A	Set B	Set C	Set D	Set E
1	4	2	8	3	7
2	5	6	2	4	6
3	1	1	3	3	8
4	2	2	8	7	2
5	6	1	7	8	1
6	3	3	4	6	5
7	6	5	5	5	1
8	2	6	1	4	6
9	1	4	7	1	3
10	3	3	6	2	2
11	4	4	1	5	4
12	5	5	2	6	5

Score is no of items answered correctly

Maximum Score for each set = 12
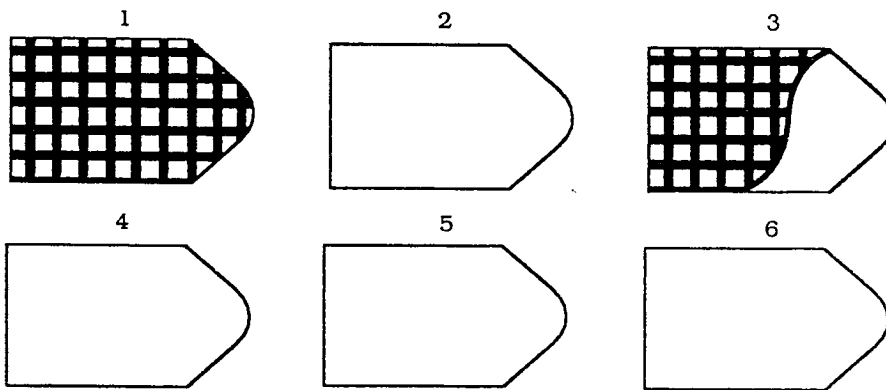Maximum Total Score   = 60

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ILLUSTRATIONS FROM THE SETS A, B, C, D & E
OF RAVEN'S PROGRESSIVE MATRICES

SET A

The first set, Set A includes rather simple problems. The correct answer figure can be selected from the six alternatives and the selected one will fit into the pattern, thus giving it a definite shape. A specimen copy of each set is given below.
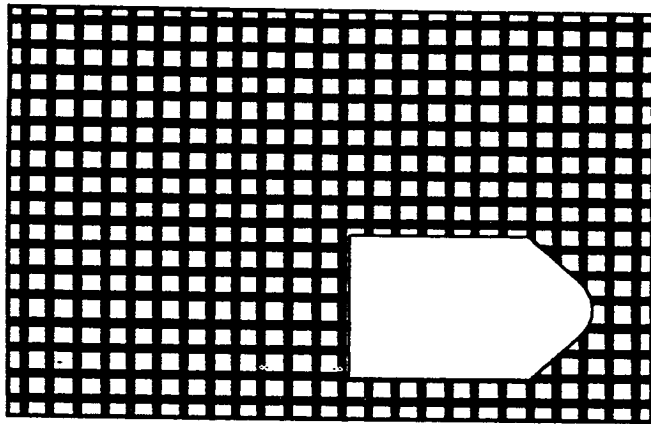
SET B

The problems in Set B are also very easy to understand. The answer figures to these problems are, some what identical to the elements given in the pattern. In some problems the answer figure can also be derived as the mirror image of the element which is printed at the top position.
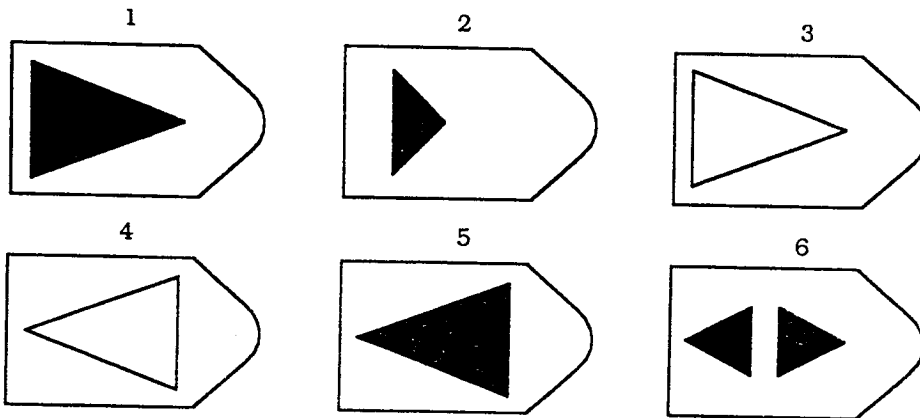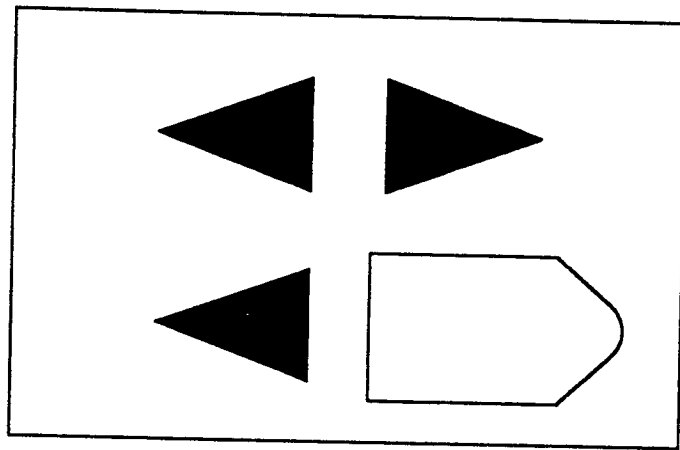
SET C

Set C is same with a complicated nature. This set is designed to provide a reliable estimate of a person's capacity to think clearly when allowed to work steadily at his or her own speed from beginning to the end without interruption

The first few item in this set are rather easy. There are enough difficult problems to discriminate between adults.
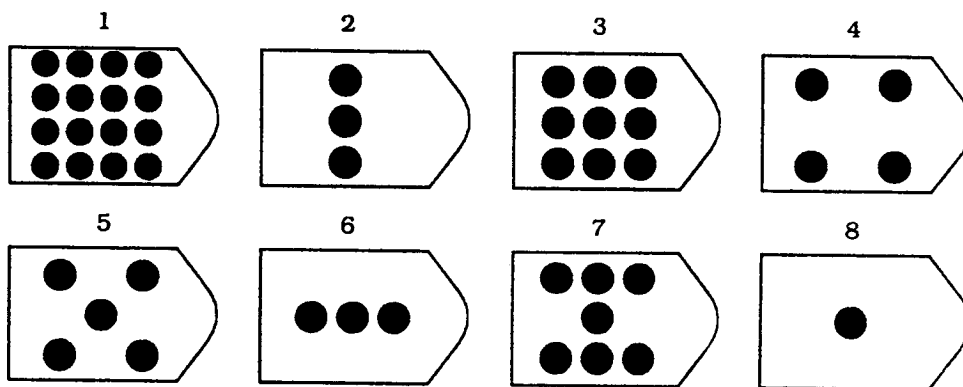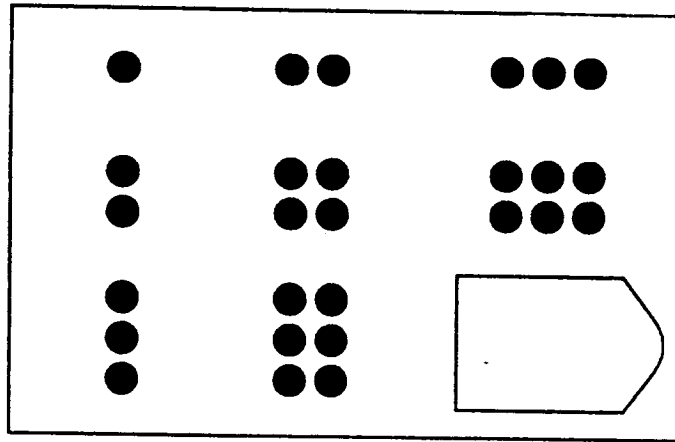
SET D

To solve the problems in this Section a high level of reasoning power is required. The items in this set distinguish the immature person from the person of normal, or more than normal, intellectual ability. The test item follows a particular order and twisting to get the desired answer figure.

1

2

3

4

5

6

7

8
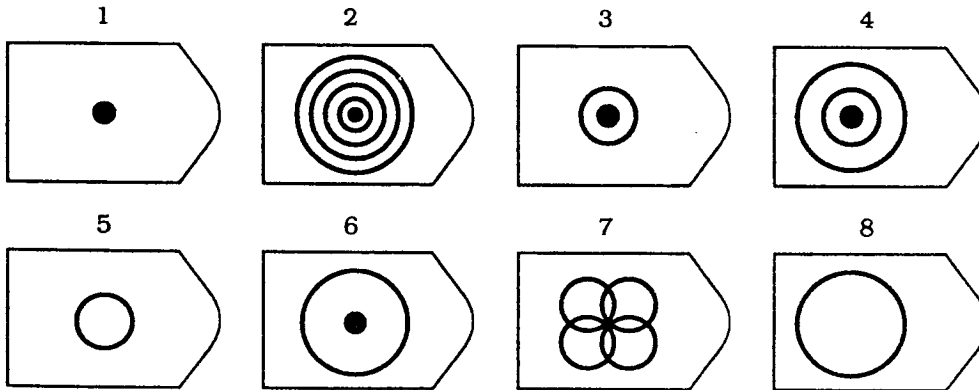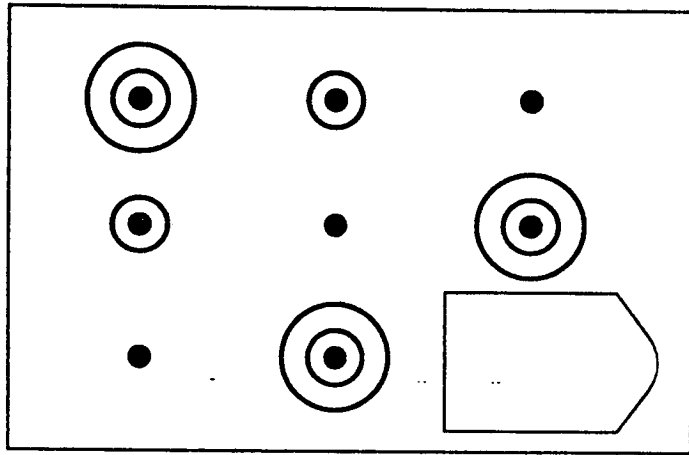
SET E

Set E is somewhat intricate in pattern. Eight alternatives are given for each problem. Most of the pupils found it difficult to answer this set completely.
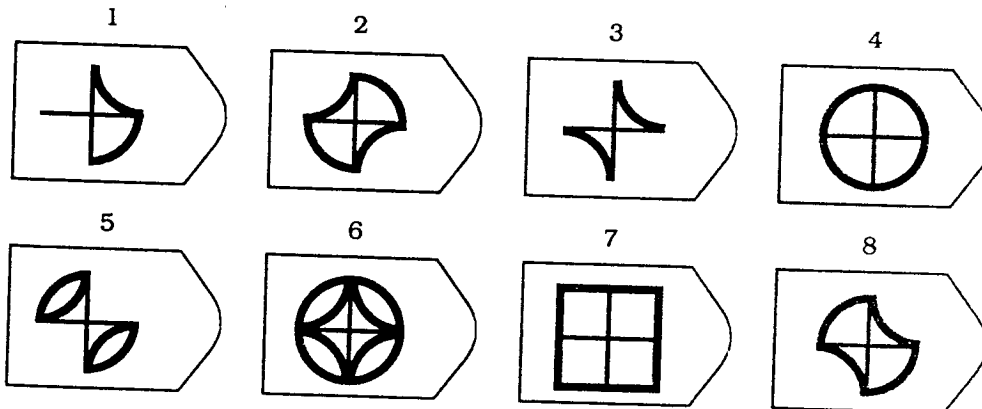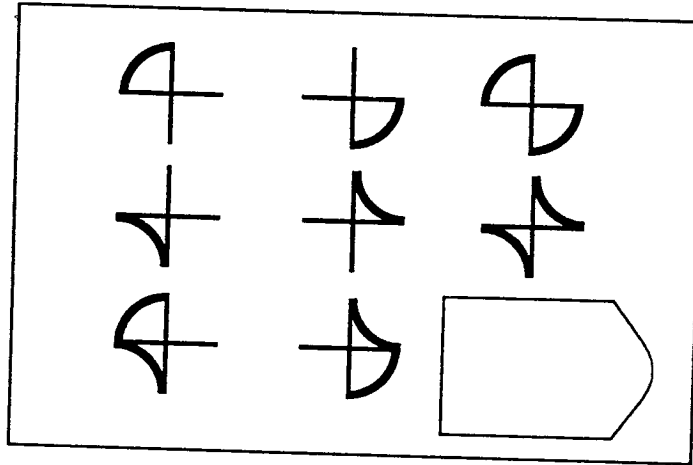
APPENDIX II (d)

INTELLIGENCE TEST SCORES OBTAINED BY THREE GROUPS
(Total Score 60)

Sl.No.	MLM	AOM	TM	Sl.No.	MLM	AOM	TM
1	17	26	20	22	18	26	50
2	26	19	24	23	19	18	18
3	24	19	26	24	21	27	19
4	25	22	25	25	25	24	24
5	24	26	22	26	18	23	24
6	27	28	22	27	26	20	29
7	21	26	17	28	20	18	29
8	28	26	18	29	19	17	22
9	31	32	18	30	31	19	26
10	34	32	34	31	33	35	33
11	31	33	30	32	32	35	37
12	41	33	35	33	32	41	41
13	45	31	31	34	31	33	36
14	32	36	34	35	31	44	34
15	34	36	33	36	34	43	34
16	32	32	36	37	32	32	40
17	56	31	32	38	40	33	41
18	50	47	31	39	55	55	52
19	49	50	53	40	51	51	52
20	48	54	52	41	49	49	50
21	26	52	50	42	48	48	49

DEPARTMENT OF ADULT EDUCATION
AND EXTENSION SERVICES
UNIVERSITY OF CALICUT

നിർദ്ദേശങ്ങൾ :-

ഗവേഷണത്തിനുപയോഗിക്കാൻ നിങ്ങളുടെ വ്യക്തിപരമായ വിവരങ്ങൾ ശേഖരിക്കാനാണ് ഇവ്വകൊണ്ട് ഉദ്ദേശിക്കുന്നത്. കുടുംബാംഗങ്ങളെക്കുറിച്ചുള്ള വിവരങ്ങൾ കഴിയുന്നിടത്തോളം, ശരിയായി രേഖപ്പെടുത്തുക.

1. പേര് :

2. ആൺകുട്ടി / പെൺകുട്ടി :

3. വയസ്സ് :

4. മതം :

5. സ്കൂൾ :

6. സ്കൂൾ സ്ഥിതി ചെയ്യുന്ന സ്ഥലം
   പഞ്ചായത്ത് / മുൻസിപ്പാലിറ്റി /
   കോർപ്പറേഷൻ :

സാമൂഹിക – സാമ്പത്തിക നിലവാര സൂചിക

ക്രമ നമ്പർ	കുടുംബാംഗത്തിന്റെ പേര്	കുടുംബനാഥനുമായുള്ള ബന്ധം	വിദ്യാഭ്യാസ യോഗ്യത	തൊഴിൽ	പ്രതിമാസ വരുമാനം
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

കഴിഞ്ഞ പരീക്ഷയിൽ കിട്ടിയ മാർക്ക്

a) മലയാളം :

b) ഇംഗ്ലീഷ് :

c) ഹിന്ദി :

d) ഫിസിക്സ് :

e) ബയോളജി :

f) കെമിസ്ട്രി :

g) സോഷ്യൽ സയൻസ് :

h) കണക്ക് :

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APPENDIX III (b)

SOCIO-ECONOMIC STATUS SCORES OF THE THREE GROUPS
(Score 1 – 30)

Sl.No.	MLM	AOM	TM	Sl.No.	MLM	AOM	TM
1	1	3	3	22	18	1	3
2	7	4	4	23	7	4	7
3	10	7	7	24	3	8	8
4	4	8	10	25	10	7	4
5	7	10	7	26	1	18	18
6	8	4	8	27	18	3	4
7	4	7	18	28	1	18	4
8	8	18	8	29	7	7	10
9	18	18	4	30	3	30	24
10	18	7	18	31	7	1	4
11	3	8	4	32	18	24	3
12	7	24	18	33	1	7	8
13	24	18	24	34	24	4	18
14	4	7	7	35	24	24	1
15	18	1	1	36	8	7	24
16	8	1	30	37	4	18	18
17	3	24	7	38	24	3	8
18	7	18	18	39	4	8	1
19	30	4	7	40	18	10	10
20	1	8	3	41	8	7	7
21	7	3	4	42	7	1	7

Appendix IV (a)

വയോജന വിദ്യാഭ്യാസ വ്യാപന വിഭാഗം
കോഴിക്കോട് സർവ്വകലാശാല

മുന്നറിവ് പരിശോധന – വാചികം ചോദ്യാവലി

തയ്യാറാക്കിയത് : ഡോ. കെ കരുണാകരനും ശ്രീമതി. സി. ദാമിനിയും

<div align="right">ആകെ മാർക്ക് : 10</div>

1 ഉച്ചാരണ ശുദ്ധിയോടെ വായിക്കുക.
   ഫലിതം
   ഭൂമി
   അഞ്ജലി
   പ്രസ്താവന

2 താളബോധത്തോടെ താഴെ കാണുന്ന വരികൾ ചൊല്ലുക.
   രാഗങ്ങളോരോന്നേ ഗോകുലനായകൻ
   മേളം കലർന്നങ്ങു പാടുന്നേരം
   വൃന്ദാവനം തന്നിലുള്ളൊരു ജീവികൾ
   നന്ദിച്ചു നിന്നുതേ മന്ദം മന്ദം

3 താഴെ കാണുന്ന വരികൾ സ്വന്തമായി താളം കണ്ടെത്തി പാടുക.
   ചെറുപുള്ളിച്ചിറകുള്ള ചങ്ങാലിപ്രാവേ
   തലതല്ലിക്കരയുന്നതെന്തുകൊണ്ടോ നിന്റെ
   തലതല്ലിക്കരയുന്നതെന്തുകൊണ്ടോ
   പറയുന്നു ചങ്ങാലി ഞാനിന്നു നാഴി
   പ്പയറെൻ മകൾക്കു കൊടുത്തുപോയുപ്പിട്ടു
   തിരിയെ വരുമ്പോൾ വറുത്തുവയ്ക്കാൻ

4 "നമ്മുടെ കണ്ണിലുണ്ണിയും പ്രസിദ്ധനും പൊതുകാര്യ പ്രസക്തനും എഴുത്തുകാരനും അധ്യാപകനുമായ ശിവ കുമാർ അവർകൾക്ക് ഈ വേദിയിലേക്ക് സ്വാഗതം ആശംസിക്കുന്നു." - ഇതിലെ അലങ്കാര പ്രയോഗങ്ങൾ കണ്ടെത്തി പറയുക.

5 താഴെ കാണുന്ന ഖണ്ഡിക വായിച്ച് ചോദ്യങ്ങൾക്ക് ഉത്തരം പറയുക.
   മലയാള സാഹിത്യത്തിൽ ആക്ഷേപഹാസ്യം ഫലപ്രദമായി കൈകാര്യം ചെയ്ത എഴുത്തുകാരനാണ് സഞ്ജയൻ എന്ന തൂലികാ നാമത്തിൽ അറിയപ്പെടുന്ന മാണിക്കോത്തു രാമുണ്ണി നായർ. സമൂഹത്തിലെ തിന്മകളെ ശക്തിയുക്തം എതിർക്കുവാൻ സഞ്ജയൻ തന്റെ തൂലിക പ്രയോജനപ്പെടുത്തി. കഥാരൂപ ത്തിലും കവിതാ രൂപത്തിലും പല രാഷ്ട്രീയ സാമൂഹ്യ വിമർശനങ്ങളും ശ്രദ്ധേയമായിട്ടുണ്ട്.

   1. മലയാള സാഹിത്യത്തിലെ ഒരു ആക്ഷേപ സാഹിത്യകാരൻ?
   2. സഞ്ജയന്റെ യഥാർത്ഥ പേരെന്ത്?
   3. സഞ്ജയന്റെ വിമർശനങ്ങളുടെ പ്രത്യേകത എന്ത്?

18. വർണ്ണങ്ങൾ കൂടിച്ചേരുന്ന അക്ഷരക്കൂട്ടം?
(ശബ്ദം, പദം, ചില്ല്, വാക്യം)

19. ഭാഷയിൽ സന്ധികൾ പ്രധാനമായി എത്രതരം?
(2,4,6, 8)

20. ഇവയിൽ ചില്ല് ഏത്?
(ണ, ണ്ട, ൻ, ണ്ഡ)

21. മലയാളത്തിലെ സ്വരങ്ങളുടെ എണ്ണം?
(13, 16, 11,26)

22. – U – ഇങ്ങനെ ലഘുഗുരുക്രമം വരുന്ന ഗണം ഏത്?
(യ, ത, ര, ഭ)

23. സർവ്വഗുരുവായ ഗണം?
(യ, മ, ന, ഗ)

24. ലഘുവിനെ സൂചിപ്പിക്കുന്ന ചിഹ്നം?
(– U ! ?)

25. ഗുരുവിനെ സൂചിപ്പിക്കുന്ന ചിഹ്നം?
(– U ! ?)

26. പദ്യം വാർക്കുന്ന രീതിക്ക് പറയുന്ന പേര്?
(അലങ്കാരം, വൃത്തം, സമാസം, വിഭക്തി)

27. ഒരു ശ്ലോകം എത്ര വരി കൂടിച്ചേർന്നതാണ്?
(1, 2, 3, 4)

28. പദ്യങ്ങളിൽ വൃത്തങ്ങൾ ഭാഷാവൃത്തവും .... വൃത്തവുമാണ്.
(ഹിന്ദി, സംസ്കൃതം, ഇംഗ്ലീഷ്, മറാട്ടി)

29. സർവ്വ ലഘുവായ ഗണം (യ, മ, ന,ഗ)

30. പ്രേമത്തിൻ തിളക്കം കണ്ടതു ചെന്നെടുക്കായ്വിൻ - ഇതിലെ ആദ്യ ഗണക്രമം?
(യഗണം, രഗണം, തഗണം, മഗണം)

31. ബാലത്വമങ്ങനെ കഴിച്ചിതു നാളിൽ നാളിൽ - ഇതിലെ ആദ്യ ഗണക്രമം?
(യഗണം, രഗണം, തഗണം, മഗണം)

32. അലങ്കാരങ്ങളെ ശബ്ദാലങ്കാരമെന്നും .... എന്നും വിഭജിച്ചിരിക്കുന്നു.
(അർത്ഥാലങ്കാരം, ഉപമാലങ്കാരം, ഉൽപ്രേക്ഷ, രൂപകാലങ്കാരം)

33. ഒരു വസ്തുവിന് മറ്റൊരു വസ്തുവിനോടുള്ള സാമ്യം പറയുന്നതാണ്?
(ഉപമ, ഉൽപ്രേക്ഷ, രൂപകം, ശ്ലേഷം)

34. ഒരു വസ്തുവിനെ മറ്റൊരു വസ്തുവായി സംശയിക്കുന്ന അലങ്കാരം?
(ഉപമ, ഉൽപ്രേക്ഷ, രൂപകം, സ്വഭാവോക്തി)

35. വർണ്ണ്യവസ്തുവാണ് ....
(ഉപമേയം, ഉപമാനം, പദം, വർണ്ണം)

36. ഉപമാലങ്കാരം പ്രയോഗിക്കാൻ സാധാരണയായി ഉപയോഗിക്കുന്ന പദം?
(പോലെ, കൊണ്ട്, അത്ര, കാരണം)

37. ഹ്രസ്വാക്ഷരത്തിനു ശേഷം അനുസ്വാരം വന്നാൽ അത് ....
(ഗുരുവാകും, ലഘുവാകും, ദീർഘമായുച്ചരിക്കും , മാറ്റമൊന്നുമില്ല)

38. ആകെ ഗണങ്ങൾ എത്ര വിധം?
(8,7,6,5)

39. കാലാന്തരേകയ്പ്പു ശമിപ്പതുണ്ടോ? - ഗണം തിരിക്കുക?

40. പരതന്ത്രം സുഖമൊക്കെ ദുഃഖമാം - ഗണം തിരിക്കുക?

Appendix IV (c)

മുന്നറിവു പരിശോധന

ഉത്തരസൂചി

1. ശബ്ദം
2. ത് + യ് + ആ
3. ക് + ള് + ഇ
4. വാഴ + ഇല
5. പദം
6. കൈ + കുമ്പിൾ
7. കാറ്റ് + ഉണ്ട്
8. നാമം
9. ക്രിയ
10. ദേഹകം
11. നാമം
12. നാമം
13. വിശേഷണം
14. ക്രിയ
15. സന്ധി
16. അലങ്കാരം
17. പദം
18. ശബ്ദം
19. നാല്
20. ണ്

21. 13
22. ര
23. മ ഗണം
24. U
25. —
26. വൃത്തം
27. 4
28. സംസ്കൃതം
29. ന ഗണം
30. ത ഗണം
31. ഭ ഗണം
32. അർത്ഥാലങ്കാരം
33. ഉപമ
34. ഉൽപ്രേക്ഷ
35. ഉപമേയം
36. പോലെ
37. ഗുരുവാകും
38. 8
39. — — U — — U U — U U —
40. U U — — U U — U — U —

Appendix IV (d)

PRE-REQUISITES TEST SCORES OBTAINED BY THREE GROUPS
(Marks out of 50)

Sl.No.	MLM	AOM	TM	Sl.No.	MLM	AOM	TM
1	49	50	50	22	50	49	49
2	49	50	49	23	50	49	50
3	50	50	50	24	50	49	32
4	50	49	50	25	50	50	50
5	49	50	50	26	34	50	49
6	50	49	50	27	49	49	50
7	48	50	38	28	49	49	49
8	50	50	50	29	50	38	50
9	49	50	50	30	50	50	50
10	50	40	50	31	41	49	46
11	49	49	50	32	50	50	50
12	49	49	39	33	35	49	50
13	49	49	50	34	50	50	50
14	50	49	49	35	50	41	49
15	49	50	49	36	50	50	49
16	25	49	49	37	50	50	50
17	50	49	35	38	50	39	49
18	49	50	50	39	50	49	49
19	50	50	50	40	37	49	50
20	49	26	49	41	50	49	50
21	50	50	49	42	50	36	50

Appendix V (a)

പാഠാസൂത്രണം – നിപുണപഠനം

അദ്ധ്യാപിക	:	**സി. ഭാമിനി**	ക്ലാസ്സ്	:	പത്താംതരം
വിദ്യാലയം	:	ഗവ. ഹയർ സെക്കന്ററി സ്ക്കൂൾ, ബേപ്പൂർ	കുട്ടികൾ	:	42
വിഷയം	:	മലയാളം	സമയം	:	40 മിനിറ്റ്
പാഠം	:	ശിഷ്യനും മകനും	തിയ്യതി	:	05/10/01
പാഠഭാഗം	:	വിരോധാഭാസം– അലങ്കാരം			

പാഠാപഗ്രഥനം

ബോധനോദ്ദേശ്യം : ശേഷിവികസനം

വിരോധാഭാസാലങ്കാരത്തിന്റെ

1   ലക്ഷണം ഗ്രഹിക്കുന്നു
2   നാമകരണത്തിന്റെ ഔചിത്യം കണ്ടെത്തുന്നു
3   കാവ്യഭംഗി കണ്ടെത്തുന്നു
4   ആസ്വാദന ശേഷി വർദ്ധിക്കുന്നു
5   പൊതുതത്വങ്ങൾ രൂപീകരിക്കുന്നു
6   സ്വന്തമായി നിഗമനങ്ങൾ രൂപീകരിക്കുകയും ഉദാഹരണങ്ങൾ കണ്ടെത്തുകയും ചെയ്യുന്നു.

കുട്ടി പാഠഭാഗവുമായി ബന്ധപ്പെട്ട് സ്വയം രൂപീകരിക്കേണ്ട പൊതുതത്ത്വങ്ങൾ

മ) വിരോധാഭാസാലങ്കാരത്തിന്റെ പ്രഥമ ശ്രവണത്തിൽ ആശയത്തിൽ വൈരുദ്ധ്യമുള്ളതായി അനുഭവപ്പെടുന്നു.

യ) അവതരണരീതി കാവ്യഭംഗി വർദ്ധിപ്പിക്കുന്നതായി തിരിച്ചറിയുന്നു.

ര) വിരോധാഭാസത്തിൽ യഥാർത്ഥത്തിൽ വൈരുദ്ധ്യമില്ലെന്ന് കണ്ടെത്തുന്നു.

റ) വൈരുദ്ധ്യമില്ലായ്മക്ക് യുക്തിയുണ്ടെന്നു തിരിച്ചറിയുന്നു.

ല) വിരോധാഭാസാലങ്കാരം കണ്ടെത്തുന്നു.

അനുബന്ധശേഷികൾ

മ) സമൂഹത്തിൽ ഉചിതമായി ഇടപെടാൻ കഴിയുന്നു.

യ) പ്രശ്നങ്ങൾ നിർധാരണം ചെയ്യാനുള്ള മാനസികാവസ്ഥ ഉണ്ടാവുന്നു.

ര) അവനവന്റെ അവസരത്തിന് കാത്തുനിൽക്കാനുള്ള സന്നദ്ധത ഉണ്ടാവുന്നു.

റ) സ്വന്തം അഭിപ്രായം, നിഗമനം എന്നിവ രൂപീകരിക്കാനുള്ള കഴിവ് നേടുന്നു.

ല) സ്വന്തം തെറ്റുകൾ ചൂണ്ടിക്കാണിക്കുമ്പോൾ അംഗീകരിക്കാനും തിരുത്താനുമുള്ള മനോഭാവം വളരുന്നു.

മുന്നറിവ്

മ) അലങ്കാരം എന്തെന്നും അത് കാവ്യഭംഗിക്കു വേണ്ടിയാണെന്നും കുട്ടിക്കറിയാം.

യ) ഉപമ, ഉൽപ്രേക്ഷ തുടങ്ങിയ അലങ്കാരങ്ങൾ കുട്ടിക്കറിയാം.

ര) വൈരുദ്ധ്യാർത്ഥം വരുന്ന പ്രയോഗങ്ങൾ സംസാരഭാഷയിൽ കേട്ടിട്ടുണ്ട്.

റ) കുട്ടിക്ക് കവിതകൾ വായിച്ച് ആശയം ഗ്രഹിക്കാനും അത് പ്രകടിപ്പിക്കാനും കഴിവുണ്ട്.

പഠനസഹായികൾ

മ) വിരോധാഭാസമുള്ളതും ഇല്ലാത്തതുമായ വരികളെഴുതിയ ചാർട്ട്.

യ) വിരോധാഭാസത്തിന്റെ ലക്ഷണമെഴുതിയ ചാർട്ട്.

ര) ഭാഷാഭൂഷണം.

റ) ഉപമ- വിരോധാഭാസം അലങ്കാരങ്ങൾക്ക് ഉദാഹരണമായുള്ള വരികൾ ആലപിച്ച ഓഡിയോ കാസറ്റ്.

പാഠ്യവസ്തു	സ്ഫഷ്ടീകരണം	പഠനാനുഭവങ്ങൾ	മൂല്യനിർണ്ണയം
# ഘട്ടം – 1 ## മുന്നറിവുപരിശോധന മുൻ ക്ലാസുകളിൽ പഠിച്ച ഉപമ, ഉൽപ്രേക്ഷ തുടങ്ങിയ അലങ്കാരങ്ങൾ	ചാർട്ട് വായിക്കുന്നു ഓർമ്മിക്കുന്നു പുനഃസ്മരിക്കുന്നു പുനഃസ്മരിക്കുന്നു പുനഃസ്മരിക്കുന്നു	അധ്യാപകൻ ചുവടെ കൊടുത്തിട്ടുള്ള കവിതാ വരിക ളെഴുതിയ ചാർട്ട് പ്രദർശിപ്പിക്കുന്നു. ചാർട്ട് നമ്പ്ര് : 1 > ഇക്കേരളാഖ്യ വിഷയത്തിനു നേർ കിഴക്കാ- > യൂക്കേറിടും പ്രകൃതി കെട്ടിയ കോട്ടപോലെ. ചാർട്ട് നമ്പ്ര് : 2 > നാലഞ്ചുനാളായൊറ്റക്കിടപ്പായിരുന്നോൾ > തൻമേലനക്കുന്നു യമരാജന്റെ സൗജന്യമോ? ഇവയിൽ അലങ്കാരമുണ്ടെന്നും കാവ്യഭംഗി കൈവരു ന്നുണ്ടെന്നും കുട്ടികൾക്കറിയാം. ഇവയെ രണ്ടായി വേർ തിരിച്ച് അവയിലെ ആശയവും കാവ്യഭംഗിയും താരതമ്യം ചെയ്യാൻ പാകത്തിൽ ചോദ്യങ്ങൾ ചോദിക്കുന്നു. ചാർട്ട് – 1 ൽ എന്തിനെക്കുറിച്ചാണ് പറഞ്ഞിരിക്കുന്നത്? കേരളത്തെക്കുറിച്ചാണെന്നു കുട്ടി ഉത്തരം പറയുന്നു. കേരളത്തിനു നേർ കിഴക്കായി സ്ഥിതി ചെയ്യുന്ന കോട്ടയുടെ പ്രത്യേകത എന്ത്? പ്രകൃതി കെട്ടിയതുപോലെയാണ് എന്ന് കുട്ടി.ഉത്തരം പറയുന്നു. കേരളത്തിന്റെ കിഴക്കെ അതിര് എന്താണ്?	

പാഠ്യവസ്തു	സ്ഫഷ്ടീകരണം	പഠനാനുഭവങ്ങൾ	മൂല്യനിർണ്ണയം
		കിഴക്കെ അതിര് സഹ്യപർവ്വതമാണ് എന്ന് കുട്ടി ഉത്തരം പറയുന്നു.	
	പുനഃസ്മരിക്കുന്നു	സഹ്യപർവ്വതത്തെ എന്തിനോടാണ് ഉപമിച്ചിരിക്കുന്നത്? പ്രകൃതി കെട്ടിയ കോട്ടയോട് ഉപമിച്ചിരിക്കുന്നു.	
	പുനഃസ്മരിക്കുന്നു	ഇവിടത്തെ അലങ്കാരം വ്യക്തമാക്കാനുള്ള അധ്യാപകന്റെ ചോദ്യത്തിന് ഉത്തരം പറയുന്നതിലൂടെ ഉപമാലങ്കാരത്തിന്റെ ലക്ഷണവും ഈ സന്ദർഭത്തിലെ ഉപമാലങ്കാരത്തിന്റെ ഔചിത്യവും കുട്ടി വിശദീകരിക്കുന്നു.	
	പുനഃസ്മരിക്കുന്നു	ചാർട്ട് - 2 ൽ മുത്തശ്ശിയുടെ അവസ്ഥ എങ്ങിനെയാണ്? മരിക്കാൻ കിടക്കുകയാണ് എന്ന് കുട്ടി ഉത്തരം പറയുന്നു.	
	പുനഃസ്മരിക്കുന്നു	കവി ഇവിടെ എന്താണ് ഉൽപ്രേക്ഷിച്ചിരിക്കുന്നത്? മരിക്കാൻ കിടക്കുന്ന മുത്തശ്ശി മേലനക്കിയത് യമരാജന്റെ സൗജന്യമാണോ എന്ന് കവി ഉൽപ്രേക്ഷിച്ചിരിക്കുന്നതായി കുട്ടി ഉത്തരം പറയുന്നു.	
	ഓർമ്മിക്കുന്നു	ഇത് പോലെ നിങ്ങൾ പഠിച്ചിട്ടുള്ള മറ്റ് അലങ്കാരങ്ങളുടെ പേരുകൾ പറയുക? രൂപകം, സ്വഭാവോക്തി, കാവ്യലിംഗം തുടങ്ങിയ അലങ്കാരങ്ങൾ എന്നു കുട്ടി ഉത്തരം പറയുന്നു.	
ഘട്ടം – 2 **പാഠ്യപ്രവേശകം** 1 ശിഷ്യൻ പ്രവർത്തിച്ചതു വീരധർമ്മം സുധാംഗവൈകല്യമൊരുഗ്രശല്യം	ശ്രദ്ധിക്കുന്നു	പാഠ്യവസ്തുവായ അലങ്കാരമുള്ള വരികൾ കാസറ്റിലൂടെ കേൾപ്പിക്കുന്നു.	

4

പാഠ്യവസ്തു	സ്ഫഷ്ടീകരണം	പഠനാനുഭവങ്ങൾ	മൂല്യനിർണ്ണയം
സർവ്വജ്ഞനെന്നാലുമിതിങ്കൽ ഞായം തോന്നാഞ്ഞു ചിന്താവശനായ് മഹേശൻ.	ശ്രദ്ധിക്കുന്നു	ഉപമ വരുന്ന മന്നവേന്ദ്രാ വിളങ്ങുന്നു ചന്ദ്രനെപ്പോലെ നിൻമുഖം - വരികൾ കേൾപ്പിക്കുന്നു.	
2 മന്നവേന്ദ്രാ വിളങ്ങുന്നു ചന്ദ്രനെപ്പോലെ നിൻമുഖം	ചാർട്ട് വായിക്കുന്നു	ഇവ രണ്ടും എഴുതിയ ചാർട്ടുകൾ പ്രദർശിപ്പിച്ച് രണ്ടു സെറ്റിലേയും ആശയത്തിന്റെ വ്യക്തതയും വ്യത്യസ്തതയും ബോധ്യപ്പെടുത്തുന്ന ചോദ്യങ്ങൾ ചോദിക്കുന്നു.	ആരാണ് ചിന്താവിവശനായത്?

ശിഷ്യന്റെ വീരപ്രവർത്തി വീരധർമ്മമാണെങ്കിലും മകന്റെ പരിക്ക് മനഃപ്രയാസമുണ്ടാക്കുന്നു. സർവ്വജ്ഞനായിട്ടുംഇതിൽ ഞായം തോന്നാതെ മഹേശൻ ചിന്താവിവശനായി.	വിശദാംശങ്ങൾ കണ്ടുപിടിക്കുന്നു.	ചോ(1) ചിന്താവിവശനായത് ആര്?
		    മഹേശൻ എന്ന് കുട്ടി ഉത്തരം പറയുന്നു.
		ചോ(2) എന്തായിരുന്നിട്ടും ഞായം തോന്നിയില്ല?
		    സർവ്വജ്ഞനായിട്ടും എന്നു കുട്ടി ഉത്തരം പറയുന്നു.
			ശിഷ്യൻ പ്രവർത്തിച്ചതു...
			....
			.....................മഹേശൻ.
			ഈ വരികളിലെ ആശയമെന്ത്?

		ചോ(3) ഏതിലൊക്കെയാണ് മഹേശൻ ചിന്താവിവ ശനായത്? ശിഷ്യന്റെ പ്രവൃത്തിയിലും മകന്റെ അംഗവൈ- കല്യത്തിലും എന്നു കുട്ടി ഉത്തരം പറയുന്നു.	
	വിശദാംശങ്ങൾ കണ്ടുപിടിക്കുന്നു	ചോ(4) ഈ വരികളിലൂടെ നമുക്ക് കാണാൻ കഴിയുന്ന ശിവന്റെ അവസ്ഥ എന്ത്? സർവ്വജ്ഞനായിട്ടും ഉചിതമായ തീരുമാനം എന്ന് കുട്ടി ഉത്തരം പറയുന്നു.	
	വിശദാംശങ്ങൾ കണ്ടുപിടിക്കുന്നു	ചോ(5) എന്തുകൊണ്ടാണ് ശിവന് യുക്തമായ തീരു- മാനമെടുക്കാൻ കഴിയാഞ്ഞത്?	

പാഠ്യവസ്തു	സ്ഫഷ്ടീകരണം	പഠനാനുഭവങ്ങൾ	മൂല്യനിർണ്ണയം
		പുത്രന്റെ അംഗവൈകല്യം മനസ്സിന് വിഷമ മുണ്ടാക്കുന്നുണ്ട് എന്നതു ശരിയാണ്. ശിഷ്യന്റെ പ്രവൃത്തി ക്ഷത്രിയോചിതമാണ്. അതിനാൽ യുക്തമായ തീരുമാനമെടുക്കാൻ ശിവന് കഴിയാതെ പോവുന്നു എന്ന് കുട്ടി ഉത്തരം പറയുന്നു.	മഹേശൻ ചിന്താവിവശനായതിന് നിങ്ങൾ എന്ത് ന്യായം പറയുന്നു?
ശിവന്റെ ഈ പ്രവർത്തി വിരോധം ജനിപ്പിക്കുന്നു.	വിശദാംശം കണ്ടെത്തുന്നു	ചോ(6) ശിവന്റെ ഇത്തരത്തിലുള്ള സമീപനത്തോട് നിങ്ങൾക്ക് തോന്നുന്നതെന്ത്? വിരോധം എന്ന് കുട്ടി ഉത്തരം പറയുന്നു.	
മന്നവേന്ദ്രന്റെ മുഖം ചന്ദ്രനെപ്പോലെ വിളങ്ങുന്നു. സാമ്യമാണ് ഇവിടത്തെ കാവ്യഭംഗിക്ക് അടിസ്ഥാനം പോലെ എന്ന ഉപമാവാചകം കൊണ്ട് ഉപമാലങ്കാരം സൃഷ്ടിച്ചിരിക്കുന്നു.		ചോ(7) മന്നവേന്ദ്രാ .... നിൻമുഖം ഇതിലെ അലങ്കാരമെന്ത്? ഉപമ എന്നു കുട്ടി ഉത്തരം പറയുന്നു.	മന്നവേന്ദ്രാ .... നിൻമുഖം – അലങ്കാരമെന്ത്?
		ചോ(8) ഇവിടത്തെ ഉപമാവാചകം ഏത്? പോലെ എന്നു കുട്ടി ഉത്തരം പറയുന്നു.	
		ചോ(9) ഉപമക്ക് (ഇവിടത്തെ കാവ്യഭംഗിക്ക്) അടിസ്ഥാനം എന്ത്? സാമ്യം എന്നു കുട്ടി ഉത്തരം പറയുന്നു	ശിഷ്യൻ പ്രവർത്തി......... .... വരികളിലെ കാവ്യഭംഗിക്ക് അടിസ്ഥാനമെന്ത്?
		ചോ(10) മുൻ പറഞ്ഞ കവിതയിൽ കാവ്യഭംഗിക്ക് അടിസ്ഥാനമായത് എന്തായിരുന്നു? വിരോധം എന്നു കുട്ടി ഉത്തരം പറയുന്നു.	

പാഠ്യവസ്തു	സ്ഫഷ്ടീകരണം	പഠനാനുഭവങ്ങൾ	മൂല്യനിർണ്ണയം

ഘട്ടം 3
സാമാന്യ ആശയ രൂപീകരണം
 	
സാമ്യം : സംശയം എന്നിവ യഥാക്രമം ഉപമ, ഉൽപ്രേക്ഷ എന്നീ അലങ്കാരങ്ങൾക്ക് ആധാരം.
		ഉപമ, ഉൽപ്രേക്ഷ, വിരോധാഭാസം, എന്നീ മൂന്നലങ്കാ രങ്ങൾക്കും ഈ രണ്ട് ഉദാഹരണങ്ങളായി താഴെ പറയുന്ന വരികൾ നൽകുന്നു.
		
		കാവ്യഭംഗികളുടെ അടിസ്ഥാന ഘടകം പരിശോധിച്ച് അവയുടെ അടിസ്ഥാനത്തിൽ വർഗീകരിക്കാൻ പറയുന്നു.
		
		താഴെ പറയുന്ന രീതിയിൽ കുട്ടികൾ വർഗീകരിക്കുന്നു.
		സെറ്റ് 1 – സാമ്യം
		1. താളം നിരനിരയായ് നുരയിട്ടിട്ടു തങ്ങി
		    താമരത്താരുകൾപോൽ തത്തി ലയഭംഗി
		
		2. അന്തിച്ചുകപ്പേറിയ ശാരദാഭ്രം
		    പോലെ വിളങ്ങീ സ്ഫടികാവദാതൻ
		
		സെറ്റ് 2– സംശയം
		1. ഒഴുകുമുടയാടയിലൊളിയലകൾ ചിന്നീ
		   അഴകൊരുടലാർന്നപോലങ്ങനെ മിന്നീ
		
		2. കൈലാസശൈലേ കനകാഭിഷേകം
		    കഴിച്ചു നിന്നീടിന കർമസാക്ഷി
		    കാണാവതല്ലിത്തൊഴിലെന്ന കാണ്ഡേ
		    കാർകൊണ്ടലിൻ മൂടലിലായ് മുഹൂർത്തം
			താളം നിരനിരയായ് നുരയിട്ടിട്ടു തങ്ങി
			.താമരത്താരുകൾപോൽ തത്തി ലയഭംഗി
			
			ഇവിടത്തെ ആശയഭംഗി
			വ്യക്തമാക്കുക
			
			കൈലാസശൈലേ കനകാഭിഷേകം
			കഴിച്ചു നിന്നീടിന കർമസാക്ഷി
			കാണാവതല്ലിത്തൊഴിലെന്ന കാണ്ഡേ
			കാർകൊണ്ടലിൻ മൂടലിലായ് മുഹൂർത്തം

പാഠ്യവസ്തു	സ്ഫഷ്ടീകരണം	പഠനാനുഭവങ്ങൾ	മൂല്യനിർണ്ണയം
		സെറ്റ് 3 – വിരോധം – 1. ഹന്ത ചന്ദ്രമുഖിയ്ക്കിന്നു ചെന്തീയായിതു ചന്ദനം 2. ഉത്തമ പുരുഷൻമാരുടെ ഹൃദയം വജ്രത്തിലും തുലോം കഠിനം നൽത്താരിലും മൃദുതരം സത്യസ്ഥിതി പാർക്കിലാർക്കറിയാം.	ഹന്ത ചന്ദ്രമുഖിയ്ക്കിന്നു ചെന്തീയായിതു ചന്ദനം കാവ്യഭംഗിക്ക് അടിസ്ഥാനമെന്ത്?
	ആശയങ്ങളെ വർഗീകരിക്കുന്നു	സെറ്റ് 1, സെറ്റ് 2, സെറ്റ് 3 എന്നീ വർഗീകരണങ്ങളുടെ അടിസ്ഥാനം എന്താണ്? സെറ്റ് 1 ൽ കാവ്യഭംഗിയുടെ അടിസ്ഥാനം സാമ്യവും സെറ്റ് 2 ൽ സംശയവും സെറ്റ് 3 ൽ വിരോധവുമാണ് എന്ന് കണ്ടെത്തിയതായി കുട്ടികൾ പറയുന്നു.	
	സമാനാശയങ്ങളെ താരതമ്യപ്പെടുത്തുന്നു	ചോ : 1 സെറ്റ് 1, സെറ്റ് 2, സെറ്റ് 3 ഇവയിലെ അലങ്കാരമേത്? സെറ്റ് 1 ഉപമ, സെറ്റ് 2 ഉൽപ്രേക്ഷ എന്നിങ്ങനെ കുട്ടി പറയുന്നു. ലക്ഷ്യലക്ഷണങ്ങൾ വിശദീകരിക്കുന്നു.	
<u>**വിരോധാഭാസം**</u> വിരോധം തോന്നുന്ന അലങ്കാരത്തിന്റെ പേരാണ് വിരോധാഭാസം ലക്ഷണം വിരോധം തോന്നുമാറുക്തി വിരോധാഭാസമായിടും	ഉചിതമായ ശീർഷകം നിർദ്ദേശിക്കുന്നു	ചോ : 2 സെറ്റ് 3 ന് എന്തലങ്കാരമെന്ന് പേര് കൊടുക്കാം? അലങ്കാരത്തിന്റെ പേര് വിരോധാഭാസമാണെന്ന് കുട്ടി ചർച്ചയിലൂടെ കണ്ടെത്തുന്നു.	വിരോധാഭാസത്തിന്റെ ലക്ഷണമെന്ത്?

പാഠ്യവസ്തു	സ്ഫഷ്ടീകരണം	പഠനാനുഭവങ്ങൾ	മൂല്യനിർണ്ണയം
ഘട്ടം – 4 **കേന്ദ്രാശയ വിശകലനം** വിരഹിണിയായ ചന്ദ്രമുഖിക്ക് ചന്ദനം ചെന്തീയായി അനുഭവപ്പെട്ടു. ചന്ദനം ചെന്തീയായി അനുഭവപ്പെടുന്നതിനു കാരണം വിരഹമാകുന്നു. ഈ പ്രസ്താവനയാണ് വിരോധാഭാസത്തിനാധാരം	ചാർട്ട് വായിക്കുന്നു പ്രത്യേകതയും ഔചിത്യവും ചൂണ്ടിക്കാണിക്കുന്നു ഔചിത്യം കണ്ടെത്തുന്നു.	വിരോധാഭാസത്തിന്റെ ലക്ഷണമെഴുതിയ ചാർട്ട് പ്രദർശിപ്പിക്കുന്നു ചോ : 1 സെറ്റ് 3 ലെ 1 ൽ വിരോധം തോന്നാൻ കാരണമെന്ത്? ചന്ദ്രമുഖിക്ക് ചന്ദനം ചെന്തീയായി എന്നു പറഞ്ഞിരിക്കുന്നതാണ് വിരോധം ജനിപ്പിക്കുന്നതെന്ന് കുട്ടി പറയുന്നു. ചോ : 2 ചന്ദനം ചെന്തീയായി അനുഭവപ്പെടാൻ കാരണമെന്താണ്? അതിനുകാരണം വിരഹമാണെന്ന്....... അധ്യാപകന്റെ സഹായത്തോടെ കുട്ടി കണ്ടെത്തുന്നു - അപ്പോൾ അവിടെ യഥാർത്ഥത്തിൽ വിരോധമില്ലെന്നു കുട്ടി തിരിച്ചറിയുന്നു.	
			ചന്ദനം ചെന്തീയായി അനുഭവപ്പെടാൻ കാരണമെന്ത്?
മഹാന്മാരുടെ ഹൃദയം പൂവിനേക്കാൾ മൃദുലവും വജ്രത്തേക്കാൾ കഠിനവുമാണ്. ഇത് ആദ്യം കേൾക്കുമ്പോൾ വിരോധം തോന്നുന്നു. എന്നാൽ അവരുടെ അവസ്ഥാമാറ്റം സന്ദർഭാനുസരണമാണെന്ന യുക്തി കേൾക്കുമ്പോൾ	പ്രത്യേകത തിരിച്ചറിയുന്നു.	ചോ : 3 സെറ്റ് 3 ൽ 2 ൽ വിരോധം തോന്നാൻ കാരണമെന്ത്? മഹാന്മാരുടെ ഹൃദയം പൂവിനേക്കാൾ മൃദുലവും എന്നാൽ വജ്രത്തെക്കാൾ കഠിനവുമെന്നു പറയുന്നത് വിരോധം ജനിപ്പിക്കുന്നതായി കുട്ടി പറയുന്നു.	ഉത്തമപുരുഷന്മാരുടെ ഹൃദയം വജ്രത്തിലും തുലോം കഠിനം നൽത്താരിലും മൃദുതരം സത്യസ്ഥിതി പാർക്കിലോർക്കറിയാം - അലങ്കാരം നിർണയിക്കുക

പാഠ്യവസ്തു	സ്ഫഷ്ടീകരണം	പഠനാനുഭവങ്ങൾ	മൂല്യനിർണ്ണയം
അനുഭവപ്പെട്ട വിരോധം ഇല്ലാതാവുന്നു. അലങ്കാരം വിരോധാഭാസം.	വിവക്ഷിതാർത്ഥം കണ്ടെത്തുന്നു	സന്ദർഭത്തിനനുസരിച്ചാണ് ഈ മൃദുത്വവും കാഠിന്യവും മനസ്സ് കൈക്കൊള്ളുന്നതെന്ന് കണ്ടെത്തുമ്പോൾ ഇവിടെ വിരോധമില്ലെന്ന് കുട്ടി തിരിച്ചറിയുന്നു.	
	ആശയങ്ങളുടെ പരസ്പരബന്ധം കണ്ടെത്തുന്നു.	ചോ : 4 സെറ്റ് 3 ലെ രണ്ട് വിഭാഗത്തിലും യഥാർത്ഥത്തിൽ വിരോധമുണ്ടോ? യഥാർത്ഥത്തിൽ വിരോധം ഇല്ലെന്നും അത് തോന്നൽ മാത്രമാണെന്നും കുട്ടി കണ്ടെത്തുന്നു	വിരോധാഭാസാലങ്കാരത്തിന്റെ പ്രത്യേകതയെന്ത്?
## ഘട്ടം – 5 ## പൊതുതത്വ രൂപീകരണം		താഴെ പറയുന്ന ചോദ്യങ്ങൾക്ക് ഉത്തരം കണ്ടെത്തുന്നതി ലൂടെ കുട്ടി വിരോധാഭാസത്തിന്റെ പൊതുതത്വത്തിൽ എത്തുന്നു.	
യഥാർത്ഥത്തിൽ വിരോധമില്ലാത്തിടത്ത് പ്രഥമശ്രവ ണത്തിൽ വിരോധമുണ്ടെന്നുതോന്നുകയും പിന്നീട് യുക്തിസഹമായി ചിന്തിക്കുമ്പോൾ അതില്ലാതാവുകയും ചെയ്യുന്നതാണ് വിരോധാ ഭാസത്തിന്റെ പൊതുതത്വം	ആശയം വർഗീകരിക്കുന്നു	ചോ : 1 ഈ വരികളിൽ നിങ്ങൾ കണ്ടെത്തിയ പൊതുസ്വഭാവ മെന്താണ്? വിരോധം എന്ന് കുട്ടി ഉത്തരം പറയുന്നു.	
	ആശയം വർഗീകരിക്കുന്നു	ചോ : 2 ഈ അലങ്കാരത്തിന് നിങ്ങൾ കണ്ടെത്തിയപേരെന്താണ്? വിരോധാഭാസമെന്ന് കുട്ടി ഉത്തരം പറയുന്നു.	
	പ്രത്യേകത തിരിച്ചറിയുന്നു.	ചോ : 3 വിരോധാഭാസത്തിലെ വിരോധത്തിന്റെ പ്രത്യേകത എന്താണ്?	വിരോധാഭാസത്തിന്റെ സവിശേഷത എന്ത്?

Appendix IV (b)

വയോജന വിദ്യാഭ്യാസ വ്യാപന വിഭാഗം
കോഴിക്കോട് സർവ്വകലാശാല

മുന്നറിവ് പരിശോധന – ചോദ്യാവലി

തയ്യാറാക്കിയത് : ഡോ. കെ കരുണാകരനും ശ്രീമതി. സി. ഭാമിനിയും

ആകെ മാർക്ക് : 40

1. ഭാഷയുടെ ഏറ്റവും അടിസ്ഥാനഘടകം
   (അക്ഷരം, വർണ്ണം, ശബ്ദം, അർത്ഥം)

2. 'ത്യ' വർണ്ണങ്ങളാക്കിയാൽ
   (ത്+യ്+അ, ത്യ+ അ, ത്+യ്+ആ)

3. കിളി എന്ന പദം വർണ്ണങ്ങളാക്കിയാൽ
   (കി + ളി, ക്+ള്+ ഇ, ക്+ഇ+ ള് + ഇ, ക് +ഇ+ളി)

4. വാഴയില എന്ന പദം പിരിച്ചാൽ
   (വാഴ+ഇല, വാഴ+യില, വാഴാ+ഇല, വാഴാ+യില)

5. പ്രകൃതിയും പ്രത്യയവും ചേർന്നുണ്ടാകുന്നതാണ്
   (ശബ്ദം, വർണ്ണം, പദം, വിഭക്തി)

6. കൈക്കുമ്പിൾ പദം പിരിച്ചാൽ
   (കൈ + ക്കുമ്പിൾ, കൈ+ കുമ്പിൾ, കൈക്ക് + കുമ്പിൾ, കൈക്കു+മ്പിൾ)

7. കാറ്റുണ്ട് : പദം പിരിച്ചാൽ -
   (കാറ്റ് +ഉണ്ട്, കാറ്റു+ ണ്ട്, കാറ്റു+ഉണ്ട്, കാ+റ്റുണ്ട്)

8. പേരിനേ കുറിക്കുന്ന ശബ്ദമാണ്
   (നാമം, ക്രിയ, വിശേഷണം, ദ്യോതകം)

9. പ്രവൃത്തിയെ സൂചിപ്പിക്കുന പദമാണ്
   (നാമം, ക്രിയ, ഭേദകം, ദ്യോതകം)

10. വിശേഷണ ശബ്ദമാണ്
    (നാമം, ക്രിയ, ഭേദകം, ദ്യോതകം)

11. കോഴിക്കോട് എന്ന പദം
    (നാമം, ക്രിയ, ഭേദകം, ദ്യോതകം)

12. മേശ എന്ന പദം
    (നാമം, വിശേഷണം, നാമവിശേഷണം, ക്രിയാവിശേഷണം)

13. മിടുക്കനെയ കുട്ടി മിടുക്കൻ എന്ന പദം
    (നാമം, ക്രിയ, വിശേഷണം, ദ്യോതകം)

14. കുളിയ്ക്കുന്നു എന്ന പദം
    (നാമം, ക്രിയ, ഭേദകം, ദ്യോതകം)

15. രണ്ടു വർണ്ണങ്ങൾ കൂടിച്ചേരുമ്പോഴുള്ള മാറ്റമാണ്
    (സമാസം, വിഭക്തി, സന്ധി, അലങ്കാരം)

16. ചമൽക്കാരത്തിന് ആശ്രയമായ വാക്യ ഭംഗിയാണ്
    (അലങ്കാരം, വൃത്തം, സമാസം, വിഭക്തി)

17. പ്രയോഗസജ്ജമായ ശബ്ദമാണ് ......
    (പദം, വാക്യം, സമാസം, സന്ധി)

പാഠ്യവസ്തു	സ്ഫഷ്ടീകരണം	പഠനാനുഭവങ്ങൾ	മൂല്യനിർണ്ണയം
ഘട്ടം – 6 നിഗമനപുനഃപരിശോധന	ഗ്രന്ഥകാരനോട് ആദരവു പ്രകടിപ്പിക്കുന്നു	വിരോധാഭാസത്തിൽ യഥാർത്ഥത്തിൽ വിരോധമില്ലെന്നും ആദ്യം കേൾക്കുമ്പോൾ മാത്രമാണുവിരോധം തോന്നുന്ന തെന്നും അങ്ങിനെ തോന്നുന്നവിരോധത്തിന് യുക്തിയു ണ്ടെന്നും ഉദാഹരണങ്ങൾ നിരീക്ഷിച്ച് കുട്ടി പൊതു തത്ത്വം രൂപികരിക്കുന്നു. ഭാഷാഭൂഷണം പ്രദർശിപ്പിച്ചുകൊണ്ട് അധ്യാപകൻ പൊതുതത്ത്വം ഉറപ്പിക്കാൻ സഹായിക്കുന്നു.	വിരോധാഭാസത്തിന്റെ പൊതുതത്ത്വം എന്ത്?
	കോന്ദ്രാശയം കണ്ടെത്തുന്നു	വിരോധാഭാസമുള്ള വരികൾ നൽകിയും വിരോധാഭാസമു ള്ളതും ഇല്ലാത്തതുമായ വരികൾ ഇടകലർത്തിനൽകിയും വിരോധാഭാസമുള്ളവ വേർതിരിച്ചറിയാൻ സഹായിച്ചു കൊണ്ട്, വിരോധാഭാസത്തെക്കുറിച്ച് താൻ രൂപികരിച്ച പൊതുതത്ത്വം ശരിയാണെന്ന നിഗമനത്തിൽ എത്തിച്ചേരാൻ കുട്ടിയെ സഹായിക്കുന്നു.	വിരോധാഭാസത്തെക്കുറിച്ച് നിങ്ങൾ എത്തിച്ചേർന്ന നിഗമനമെന്ത്?

LESSON PLAN : MASTERY LEARNING MODEL (English

Teacher	: C. Bhamini	Class	: IX
School	: Govt. Higher Secondary School, Beyppre	Students	: 42
Subject	: Malayalam	Time	: 40 minutes
Lesson	: Sishyanum Makanum	Date	:
Portion of the lesson	: Virodhabhasam – Figure of speech		

LESSON - ANALYSIS

Objective of Teaching : DEVELOPMENT OF SKILL

Of the figure of speech 'virodhabhasam'

1) Understand the characteristics
2) Discovers the fitness of the name
3) Discovers the poetic beauty
4) Promotes the ability for appreciation
5) Forms general principles
6) Forms conclusions of one's own and discovers examples

II. THE GENERAL PRINCIPLES THE PUPIL HAS TO FORM OF HIS OWN RELATE WITH THE PORTION OF THE LESSON

a) At the first listening of the figure (of speech) virodabhasa feels as if there is a contradiction in idea
b) Identifies that the manner of presentation increasing the poetic beauty
c) Discovers that in real there is no contradiction in virodabhasam
d) Discovers that in real there is no contradiction in virodabhasam
e) Distinguishes the figure (of speech) virodabhasam

II. ADDITIONAL SKILLS
a) Could properly interfere in the society
b) Brings about the state of mind to banish the problems
c) Have the readiness to wait for one's own chance
d) Gains the ability to form one's own opinion, conclusion, etc
e) Increases the mental attitude to accept and correct one's own errors when pointed out.

IV. PREVIOUS KNOWLEDGE

1) The pupil knew what a figure is and that is for the poetic beauty
2) The child knew the figures like simile, utpreksha
3) Has heard in the spoken language the usages possessing contradictory meaning
4) The child has the ability to understand the idea of a poem by reading and also to express it.

V. LEARNING MATERIAL

1) A chart with written lines having and not having virodabhasam
2) A written chart of the characteristics of virodabhasam
3) Bhashabhooshanam
4) Audio cassette having recitations of examples for the figures simile virodabhasam

STAGE I

TESTING OF THE PREVIOUS KNOWLEDGE

Content	Specifications	Learning Experience	Evaluation
Figures like simile, utpreksha studied in the previous classes	Reads the Chart Remember	Teacher exhibits the chart in which lines of poem given below are writtten Chart I Ikkeralakhyavishayathinu Nerkizhakka- Ykkeritum Prakriti Kettiya ko tta pole Chart II Nalanchunala yottakkitappayirunnol Than melanakkunnu Yamarajante Sonjanyamo? Pupils knew that there is figure and that poetic beauty is obtaining. After separating them into two, for the proper comparison of ideas and poetic beauty in them, ask questions	.

	Recalls	In Chart No.1 what has been told about?
		Pupils answers that it is about keralam
	Recalls	What is the peculiarity of the fort that situates in the eastern position straight to kerala
		Pupils answers that is is as if the nature has built it
	Recalls	Which is the eastern frontier of Kerala?
		Pupils answers that the mountain sahya is the eastern frontier
	Recalls	To what has been copred the mountain sahya?
	Recalls	To clear the figure here the teacher asks questions; through the answer the pupil explains the characteristics of simile and the fitness of this figure in this content
	Recalls	In chart No.2 how is the state of grandmother?
		The pupil answers that she is on the death bed
	Recalls	Here. What has the poet conjectured?
		The pupil answers that the poet has conjectured that whether the physical movement of the grandmother on the death bed is a generosity of king Yama
	Remembers	Like this, tell the names of other figures you have studied
		The pupil answers the names offigures as metaphor, swabhavokthi, kavyalingam etc

STAGE 2 ENTRY TO THE LESSON	listens	Makes the child to hear the figurative lines of the lesson through the cassette	
1. Sishyan Pravarthichathu veeradhanmam Suthan gavaikalyamorugrasalyam Sarvajnanennalumithin kal nhayam Thonnanhu chinthavashanay Maheshan	Listen	Makes the child tohear the lines in which simile comes. Mannavendra Vilangunnu chandraneppole nunmukham	
2. Mannavendra vilangunnu	Reads the chart	Exhibit the charts in which both of these lines are written; asks questions that real the clarity and vidity of ideas in both sets	
Even though the action of the disciple is a valiant duty the would on the body of the son creates mntal disburbance. Being omniscient even, without seeing justice in this, maheshan felt worried with thought	Discovers the details	Q1. Who was worried with thought? The pupil answers that it was Maheshan Q2 Even what being he didn't feel justice? The pupil answers that he even being an omniscient not felt justice Q3. In which all he didn't feel justice? The child answers that it was in the action of the disciple and the physical wound of son	Who was worried with thought Sishyan pravarthichathu . . . . \ . . . . . Maheshan Whata is the idea of these lines?
	Discovers the details	Q4. What is the state of siva which we could see through these lines. The pupils answers that siva evenbeing an omniscient could not take an appropriate decision.	

	Discovers the details	Q.5 why couldn't siva take appropriate decision? The pupil answers like this: it is right that the physical defect of the son disturbs the mind. The action of the disciple is appropriate to a khatriya. There fore siva couldn't take an appropriate decision.	What justice you have to say for Maheshan being felt worried of thought?
The act of siva creates contradiction	Discovers the details	Q6. What do you feel towards the likewise approach of siva? Th e child says that it is contradiction	
The face of mannavendra shines like moon. Here, the basis of the poetic kbeautyis similarity with the word of simile 'pole' simile is created		Q7. Mannavendra. . . . . Ninmukham What is thefigure of this? The pupil says that it is simile Q8. Here, which is the conjunction denoting similarity. The pupil answers that is 'pole' Q9,. What is the base forsimile (poetic beauty) here? The pupil says that it is similarity Q 10. In the poem denoted what was the base for poetic beauty? The child says that it was contradictio	Mannavendra. . . . . Mukham What is the figure Sishyan pravarthi. . . . . What is the base of poetic beauty in these lines?
STGE 3: FORMATION OF COMMON IDEA	COMMON IDEA		
Similarity, uncertainty (apprehension) etc. are base for the figures simily and utpreksha respectively.		The given lines below carry two examples for simile, utprekha and virodabhasam Examining the basic component of poetic beauty asks to classify on its basis. The children classify as shown in the following lines.	

		Set 1. Similarity 1. Thaluniranirayay. . . . . 2. Anthichukappesiya. . . Set 2: Apprehension 1.. Ozhukumudayada…. ….. 3. Kailasasaile kanakabhishekam. . . Set 3: Contradiction 1. Hanta. . . . . 2. Uthamapurushan.	Thalu. . . . . Llayabhangi Reveal the beauty of substance here Kailasasaile. . . . . Muhoortham Explains the idea Hanta. . . . . .chandanam What is the base for poetic beauty?
	Classify the ideas	What is the base of classification of set 1 set 2, and set 3? Pupils say that in sert 1 base of poetic beauty is similarity, in set 2 it is apprehension and in set 3 it is contradiction	
	Compares similar ideas	Q1. Which is the figure in set 1 and set 2 The child answers like this: Set 1 simile. Set 2 – Utpreksha. The pupil explains aim and characteristics.	What is the characteristics of virodabhasam?
Virodabhasam Virodabhasam is the name of figure that makes us feel contrdiction Characteristics: Virodham thonnumarukti Virodabhasamayitum	Suggests appropriate title Reads the chart	Q2. For set 3 what name of figure is to be given? The pupil discovers through discussion that the name of figure is virodabhasam exhibits the chart in which characteristics virodabhasam is written.	What is the reason for feeling sandal as blazed fire?
Hearts of great men are soft than flowers and harder than diamond when we hear this first we feel contradiction. But when hearing the reason that their change of state is in apropos, contradiction	Identifies the peculiarity	Then the pupil identifies that there is no contradiction in real. Q 3. In set 3 (2) what is the reason for feeling contradiction? The pupil says: Saying that great men's hearts are soft than flowers, but harder than the diamond create contradiction	Uthamapurusha. . . . . .Aarkariyam Determine the figure

disappears. Figure virodabhasam	Discovers the intended meaning	The mind receives this softness and hardness according to context and when this is discovered the child realizes that here there is no contradiction. Q4. Is there really contradiction in the two sections of set 3. The child discover that contradiction is not there in realand it is only a feeling.	What is the peculiarity of thefigure virodabhasam?
STAGE 5 FORMATION OF GENERAL PRINCIPLE			
In real where there is no contradiction, we feel contradiction on hearing it first; then when we think rationally that feeling disappears This is the general principle of virodabhasam	Clarifies the idea	Through discovering answers to the following questions the child reaches at the general principle of virodabhasam. Q1. What is the common character that you have discovered in these lines. The child says that it is virodham. Q2. What is the name you have discovered to this figure? The pupil says that it is virodabhasam Q.3 what is the peculiarity of contradiction of virodabhasam?	
	Identifies the peculiarity	There is no contradiction in virodabhasam, we feel contradiction only when we hear it first; and for such contradiction there is reason— -through observing the examples the pupils forms the general principles.	What is the peculiarity of virodabhasam?
	Expresses respect to theauthor	Exhibiting Bhashabhooshanam the teacher helps to fix the general principle.	What is the generalprinciple of virodabhasam

STATE 6	REVALUATION OF CONCLUSION		
	Discovers the central theme	Giving lines possessing virodhabhasam and giving lines possessing and not possessing virodhabhasam helps to identify the lines possessing virodhabhasam. Thereby helps the pupil to reach in the conclusion that the general principle formed by him is correct.	What is the conclusion you have reached about virodhabhasam

REVIEW (REVISION)

1. Utan Matangunnil . . . .
   . . . .
   . . . .
   State that in these lines the figure is virodhabhasam
2. What is the characteristics of virodhabhasam?
3. What is the peculiarity of the contradiction in virodahbhasam?

Suggested Exercise

1. Discover three styles having the usage of virodhabhasam
2. Discover more examples for the figure virodhabhasam

Appendix VI (a)

അദ്ധ്യാപിക	:	**സി. ഭാമിനി**
വിദ്യാലയം	:	ഗവ. ഹൈസ്ക്കൂൾ, ബേപ്പൂർ
ക്ലാസ്സ്	:	ഒൻപതാം തരം
വിഷയം	:	മലയാളം
പാഠം	:	നിർദ്ദേശിക, പ്രതിഗ്രാഹിക, സംയോജിക – എന്നീ വിഭക്തികൾ
അഡ്വാൻസ് ഓർഗനൈസർ	:	വിഭക്തി
സമയം	:	45 മിനിട്ട്
തിയ്യതി	:	27/7/01

<u>ബോധനോദ്ദേശ്യങ്ങൾ</u>

കുട്ടി

1. വിഭക്തിയെക്കുറിച്ചുള്ള അറിവുമായി ബന്ധപ്പെടുത്തി വിഭക്തിയുടെ വിഭാഗങ്ങൾ ഗ്രഹിക്കുന്നു.

2. വിഭക്തിപ്രത്യയങ്ങൾ വേർതിരിച്ചറിയുന്നു (നിർദ്ദേശിക, പ്രതിഗ്രാഹിക, സംയോജിക)

3. വിഭക്തി പ്രത്യയങ്ങൾ ശരിയായി പ്രയോഗിക്കുന്നു.

4. ഭാഷാപ്രയോഗനൈപുണി നേടുന്നു

അഡ്വാൻസ് ഓർഗനൈസറുടെ സ്വഭാവം : കംപാരറ്റീവ്

സഹായക സിസ്റ്റം : വിഭക്തികളുടെ പേരുകൾ, പ്രത്യയങ്ങൾ, ഉദാഹരണങ്ങൾ എന്നിവയെഴുതിയ ചാർട്ടുകൾ, കേരളപാണിനീയം

പ്രവർത്തനശ്രേണി

ഘട്ടം-1 അഡ്വാൻസ് ഓർഗനൈസറിന്റെ അവതരണം

അദ്ധ്യാപിക	:	അർത്ഥപൂർണ്ണമായ ആശയവിനിമയത്തിനും ശരിയായ വാക്യഘടന സ്വായത്തമാക്കുന്ന തിനും വിഭക്തികളുടെ വിഭാഗങ്ങളായ നിർദ്ദേശിക, പ്രതിഗ്രാഹിക, ഉദ്ദേശിക എന്നിവയുടെ സവിശേഷതകളേയും അവയുടെ പ്രത്യയങ്ങളേയും കുറിച്ചാണ് ഇന്നു പഠിക്കുവാനുള്ളത്.	പഠനത്തിന്റെ ഉദ്ദേശ്യം സ്പഷ്ടമാക്കുന്നു
അദ്ധ്യാപിക	:	നാമങ്ങൾ എന്നാൽ എന്താണെന്നറിയാമല്ലോ?	
കുട്ടി	:	പേരിനെ കുറിക്കുന്ന ശബ്ദങ്ങൾ	
അ	:	എന്തിന്റെയൊക്കെ പേര്?	പഠിതാവിന്റെ നിലവിലുള്ള
കു	:	ഒരു വ്യക്തിയുടെയോ സാധനത്തിന്റെയോ സ്ഥലത്തിന്റെയോ പേര്	വൈജ്ഞാനികഘടന പരിശോധിക്കുന്നു
അ	:	നാമങ്ങൾക്ക് ഉദാഹരണങ്ങൾ പറയൂ?	
കു	:	രാമൻ, കൃഷ്ണൻ, സീത, പൂവ്, കോഴിക്കോട്, കല്ല്	
അ	:	പ്രത്യയങ്ങളെക്കുറിച്ച് നിങ്ങൾ പഠിച്ചിട്ടില്ലേ?	
കു	:	ഉണ്ട്	
അ	:	എന്താണ് പ്രത്യയങ്ങൾ?	
കു	:	പദങ്ങളുണ്ടാക്കുന്നതിന് പ്രകൃതിയിൽ ചേർക്കുന്നവയാണ് പ്രത്യയങ്ങൾ	
അ	:	പ്രകൃതിയും പ്രത്യയവും തമ്മിലുള്ള ബന്ധം ഏതുപോലെയാണെന്നാണ് പഠിച്ചിട്ടുള്ളത്?	പഠിതാവിന്റെ നിലവിലുള്ള പ്രാക്ശേഷികൾ ഉറപ്പുവരുത്തുന്നു.
കു	:	പ്രകൃതിയെ ഒരു മരത്തിന്റെ നാരായ വേരായി കരുതിയാൽ ആ മരത്തിന്റെ കവരങ്ങൾ പോലെയാണ് പ്രത്യയങ്ങൾ	
അ	:	അതായത് പ്രകൃതിയിൽ നിന്ന് പിരിക്കാൻ പറ്റാത്തവയാണ് പ്രത്യയങ്ങൾ. പ്രത്യയങ്ങൾക്ക് ഉദാഹരണം പറയാമോ?	
കു	:	എ, ഇൽ, ഓട്, ന്റെ തുടങ്ങിയവയൊക്കെ പ്രത്യയങ്ങളാണ്	സവിശേഷതകൾ കണ്ടെത്തുന്നു
അ	:	മിടുക്കൻ - ഈ പദത്തിലെ പ്രകൃതിയും പ്രത്യയവും ഏതൊക്കെയാണ്?	

കു	:	മിടുക്ക് - പ്രകൃതി അൻ - പ്രത്യയം	
അ	:	വിഭക്തി എന്നു നിങ്ങൾ കേട്ടിട്ടില്ലേ?	
കു	:	ഉണ്ട്.	
അ	:	നാമവും പ്രത്യയവും വിഭക്തിയും തമ്മിലുള്ള ബന്ധമെന്താണ്?	
കു	:	നാമങ്ങൾക്ക് മറ്റു പദങ്ങളുമായുള്ള ബന്ധം കാണിക്കുന്നതിന് നാമങ്ങളിൽ ചേർക്കുന്ന പ്രത്യയങ്ങളാണ് വിഭക്തികൾ	അഡ്വാൻസ് ഓർഗനൈസറിന്റെ അവതരണം
അ	:	നാമങ്ങളിൽ പ്രത്യയങ്ങൾ ചേർക്കുന്നതിന് ഒരുദാഹരണം പറയാമോ?	
കു	:	രാമന്റെ	
അ	:	മേൽ പറഞ്ഞതിൽ ഏത് നാമത്തോട് ഏത് പ്രത്യയമാണ് ചേർത്തത്?	
കു	:	രാമൻ എന്ന നാമത്തോട് 'ന്റെ' എന്ന പ്രത്യയം	
അ	:	പശു എന്നും പാൽ എന്നും രണ്ടുപദങ്ങൾ തന്നാൽ പശു എന്ന നാമത്തെ പാൽ എന്ന പദത്തോട് എങ്ങിനെ ബന്ധിപ്പിക്കും?	
കു	:	പശുവിന്റെ പാൽ	
അ	:	വെള്ളം എന്നും നടന്നു എന്നും രണ്ടു വാക്കുകൾ. ഇതിൽ വെള്ളം എന്ന നാമത്തെ നടന്നു എന്ന ക്രിയയോട് എങ്ങിനെ ബന്ധിപ്പിക്കും?	
ക	:	വെള്ളത്തിൽ നടന്നു	
അ	:	ഇവിടെ ഉപയോഗിച്ച പ്രത്യയമേത്?	സബ്സ്യൂമർ ആയി വർത്തിക്കേണ്ട ആശയങ്ങൾ പരിശോധിക്കുന്നു
കു	:	ഇൽ	
അ	:	രാമൻ/പത്നിയാണ്/സീത - ഇവിടെ രമൻ എന്ന നാമത്തെ - പത്നിയാണ് സീത എന്നതിനോട് ഒരു പ്രത്യയം ചേർത്ത് അർത്ഥപൂർണ്ണമായി എങ്ങിനെ ബന്ധിപ്പിക്കാം?	
കു	:	രാമന്റെ പത്നിയാണ് സീത	
അ	:	വിഭക്തി എന്നു പറഞ്ഞാലെന്താണ്?	
കു	:	മറ്റു പദങ്ങളുമായുള്ള ബന്ധം കാണിക്കുന്നതിന് നാമങ്ങളിൽ ചേർക്കുന്ന പ്രത്യയങ്ങൾക്കാണ് വിഭക്തി എന്നു പറയുന്നത്.	അഡ്വാൻസ് ഓർഗനൈസർ വ്യക്തമാക്കുന്നു
		വിഭക്തി - BB	

ഘട്ടം – 2 പാഠഭാഗത്തിന്റെ അവതരണം

അ	:	നാമങ്ങളിൽ പ്രത്യയങ്ങൾ ചേർക്കുന്നത് ശ്രദ്ധിച്ചുവല്ലോ. അർത്ഥത്തിനനുസരിച്ച് ചേർക്കുന്ന പ്രത്യയങ്ങളിലും മാറ്റം വരുന്നുണ്ട്. ഇങ്ങനെ പ്രത്യയങ്ങൾ അടിസ്ഥാനമാക്കി വിഭക്തികൾക്ക് ഓരോ പേര് നൽകിയിട്ടുണ്ട്. ആകെ 7 വിഭക്തികളാണ് മലയാള ഭാഷയിലുള്ളത്. ഇതിൽ 6 എണ്ണത്തിനു മാത്രമാണ് പ്രത്യയമുള്ളത്. ആദ്യത്തെ വിഭക്തിയായ നിർദേശികക്ക് പ്രത്യയമില്ല. തൻമതന്നെ. അതായത് നാമം. അങ്ങനെതന്നെ പ്രയോഗിക്കുന്നു. നിർദ്ദേശിക (BB)	ക്രമീകൃതവ്യവഛേദനത്തിന്റെ തത്വങ്ങൾക്കനുസരിച്ച് ഉപാശയങ്ങൾ ക്രമത്തിൽ അവതരിപ്പിക്കുന്നു.
		ഉദാ : സിംഹം ഒരു മൃഗമാകുന്നു.	
		ഇവിടെ സിംഹമെന്ന നാമം ഉദ്ദേശികാ വിഭക്തിയിലാണ്	ചാർട്ട് പ്രദർശിപ്പിക്കുന്നു.
അ	:	'പൂച്ച കരഞ്ഞു' എന്ന വാക്യത്തിലെ നാമം ഏത്?	
കു	:	പൂച്ച	
അ	:	ഇവിടെ നാമത്തോടൊപ്പം വിഭക്തി പ്രയോഗിച്ചിട്ടുണ്ടോ?	
കു	:	ഇല്ല	
അ	:	നാമം എങ്ങിനെ പ്രയോഗിച്ചിരിക്കുന്നു.	ഉപാശയങ്ങൾ വ്യക്തമാക്കുന്നു
കു	:	നാമം അതേപടി പ്രത്യയമില്ലാതെ പ്രയോഗിച്ചിരിക്കുന്നു.	
അ	:	ഇവിടെ പൂച്ച എന്ന നാമം ഏതു വിഭക്തിയിലാണ്?	
കു	:	നിർദ്ദേശിക.	
അ	:	നിർദ്ദേശികക്ക് മറ്റൊരുദാഹരണം പറയാമോ?	
കു	:	രാജൻ കണ്ടു.	
അ	:	ഇവിടത്തെ നാമമേത്?	ആശയസ്വാശീകരണം ഉറപ്പുവരുത്തുന്നു
കു	:	രാജൻ	
അ	:	ഇവിടത്തെ പ്രത്യയമോ?	
കു	:	പ്രത്യയം ഇല്ല	
അ	:	അങ്ങിനെയെങ്കിൽ ഏതു വിഭക്തി?	

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കു	:	നിർദ്ദേശിക	
അ	:	നിർദ്ദേശികാ വിഭക്തിക്ക് കൂടുതൽ ഉദാഹരണങ്ങൾ പറയാമോ?	
കു (1)	:	സുമ കണ്ടു	
കു (2)	:	അമ്മ അടിച്ചു	
കു (3)	:	അച്ഛൻ പറഞ്ഞു	
കു (4)	:	രമ കളിച്ചു	
കു (5)	:	ആന ചിന്നം വിളിച്ചു	
അ	:	രണ്ടാമത്തെ വിഭക്തിയുടെ പേര് പ്രതിഗ്രാഹികാ വിഭക്തി എന്നാണ്. അതിന് 'എ' എന്നാണ് പ്രത്യയം. പ്രതിഗ്രാഹിക (ആഅ)	ക്രമീകൃത വ്യവഛേദനത്തിലൂടെ അടുത്ത ഉപാശയം അവതരിപ്പിക്കുന്നു
അ	:	നിർദ്ദേശികാ വിഭക്തിയും പ്രതിഗ്രാഹിക വിഭക്തിയും തമ്മിൽ പ്രത്യയത്തിന്റെ കാര്യത്തിലുള്ള വ്യത്യാസമെന്താണ്?	
കു (1)	:	നിർദ്ദേശികാ വിഭക്തിക്കു പ്രത്യയമില്ല	
കു (2)	:	പ്രതിഗ്രാഹികാ വിഭക്തിക്ക് പ്രത്യയമുണ്ട്	
അ	:	പ്രതിഗ്രാഹികളുടെ പ്രത്യയം എന്താണ്?	
കു	:	'എ'- എന്നതാണ് പ്രത്യയം	ആശയ സ്വീകരണം ഉറപ്പുവരുത്തുന്നു
അ	:	രാമനെ കണ്ടു - ഇതിൽ നാമത്തിൽ ചേർത്ത പ്രത്യയമേത്?	
കു	:	'എ'	
അ	:	ഇവിടെ പ്രയോഗിക്കപ്പെട്ട വിഭക്തി ഏത്?	
കു	:	പ്രതിഗ്രാഹിക	

ചാർട്ട് പ്രദർശിപ്പിക്കുന്നു

കുട്ടിയെ അടിച്ചു	[കുട്ടി + എ]
കണ്ണനെ കണ്ടു	[കണ്ണൻ + എ]
അവനെ നോക്കി	[അവൻ + എ]

ചാർട്ട് പ്രദർശിപ്പിക്കുന്നു

അ	:	ചാർട്ടിൽ കാണിച്ചിട്ടുള്ളത് ഏത് വിഭക്തിയുടെ ഉദാഹരണമാണ്?	ആശയങ്ങളുടെ കെട്ടുറപ്പ് സാധ്യമാക്കുന്നു
കു	:	പ്രതിഗ്രാഹികയുടെ	
അ	:	പ്രതിഗ്രാഹികക്ക് കൂടുതൽ ഉദാഹരണങ്ങൾ പറയുക	
കു (1)	:	അച്ഛനെ കണ്ടു	
കു (2)	:	മന്ത്രിയെ കണ്ടു	
കു (3)	:	രാജാവിനെ മുഖം കാണിച്ചു	
കു (4)	:	സീതയെ വിളിച്ചു	
കു (5)	:	മഴയെ ശപിച്ചു	
അ	:	മൂന്നാമത്തെ വിഭക്തിയാണ് സംയോജികാ വിഭക്തി സംയോജികാ വിഭക്തിക്ക് 'ഓട്" എന്നതാണ് പ്രത്യയം സംയോജിക (BB)	ക്രമീകൃതവ്യവഛേദനത്തിലൂടെ അടുത്ത ഉപാശയം അവതരിപ്പിക്കുന്നു
അ	:	ഓട് എന്ന പ്രത്യയം ചേർത്ത് ഒരു വാക്ക് പറയാമോ?	
കു	:	കുട്ടികളോട് ചോദ്യം ചോദിച്ചു	
അ	:	ഇവിടെ പ്രത്യയം ചേർന്നത് ഏത് നാമത്തോട്?	
കു	:	'കുട്ടി' എന്നതിനോട്	
അ	:	പ്രതിഗ്രാഹികയിൽ നിന്ന് പ്രത്യയത്തിന്റെ കാര്യത്തിൽ സംയോജികക്കുള്ള വ്യത്യാസമെന്ത്?	
കു	:	പ്രതിഗ്രാഹിക വിഭക്തിക്ക് 'എ' എന്ന പ്രത്യയമാണ് എന്നാൽ സംയോജികയിൽ 'ഓട്" എന്ന പ്രത്യയമാണ് ഉപയോഗിക്കുന്നത്.	
അ	:	രാമനോട് പറഞ്ഞു, സീതയോട് ചോദിച്ചു ഈ വാക്യങ്ങളിലെ പ്രത്യയം ഏത്?	ആശയസ്വീകരണം ഉറപ്പുവരുത്തുന്നു
കു	:	ഓട്	
അ	:	അപ്പോൾ ഇവിടത്തെ വിഭക്തി ഏത്?	
കു	:	സംയോജിക വിഭക്തി	
അ	:	സംയോജികാ വിഭക്തിക്ക് മറ്റ് ഉദാഹരണങ്ങൾ പറയാമോ?	ആശയത്തിന്റെ സുസംഘടിതമായ കെട്ടുറപ്പ് സാധ്യമാക്കുന്നു
കു (1)	:	രാവണനോട് യുദ്ധം ചെയ്തു	

കു (2)	:	കുട്ടികളോട് പറഞ്ഞു	
കു (3)	:	രാമനോട് തോറ്റു	
കു (4)	:	സീതയോട് പിണങ്ങി	

ഘട്ടം 3 – വിജ്ഞാനഘടന ശക്തിപ്പെടുത്തൽ

അ	:	പ്രത്യയമില്ലാത്ത വിഭക്തി ഏതാണ്?	
കു	:	നിർദേശിക	ഉപാശയങ്ങൾ പരസ്പരം
അ	:	'എ' എന്ന പ്രത്യയം ഏത് വിഭക്തിയുടേതാണ്?	ബന്ധപ്പെടുത്തി ഉദ്ഗ്രഥനം
കു	:	പ്രതിഗ്രാഹികയുടെ	സാദ്ധ്യമാക്കുന്നു
അ	:	സംയോജികയുടെ വിഭക്തി പ്രത്യയം ഏത്?	
കു	:	'ഓട്'	
അ	:	നിർദേശികക്ക് ഒരുദാഹരണം പറയാമോ?	
കു	:	രാജൻ കണ്ടു	
അ	:	അവനെ നോക്കി – ഇതിലെ വിഭക്തി പ്രയോഗം ഏത്?	
കു	:	പ്രതിഗ്രാഹിക	
അ	:	ഇവളോടു പറഞ്ഞിട്ടു കാര്യമില്ല – ഇതിൽ വിഭക്തിയുണ്ടോ?	ഗ്രഹിച്ച ആശയം പ്രബലനം
കു	:	ഉണ്ട്	ചെയ്യുന്നു
അ	:	വിഭക്തിയുടെ പേരെന്ത്?	
കു	:	സംയോജിക	
അ	:	പ്രതിഗ്രാഹികയ്ക്ക് ഒരുദാഹരണം പറയുക	
കു	:	ആനയെ കണ്ടു	
അ	:	നിർദേശികക്ക് മൂന്നുദാഹരണം പറയൂ	
കു (1)	:	സുമ കണ്ടു	

കു (2)	:	അമ്മ അടിച്ചു
കു (3)	:	അവൻ നോക്കി
അ	:	പ്രത്യയം മാറ്റി പ്രയോഗിക്കുമ്പോൾ എന്ത് സംഭവിക്കുന്നു?
കു	:	അർത്ഥവ്യത്യാസം വരുന്നു
അ	:	റേഡിയോവിലും ടിവിയിലും ഏതുതരം പരിപാടികളോട് ബന്ധപ്പെട്ടാണ് തങ്ങളുടെ പരസ്യം വരേണ്ടത് എന്ന് തീരുമാനിക്കുന്നതിലും പരസ്യ വിദഗ്ദ്ധർ ശ്രദ്ധിക്കും. ആവന്നത്ര കൂടുതൽ ആളുകളെ ആകർഷിക്കാനിടയുള്ള പരിപാടികളോട് ഒട്ടി നിൽക്കുക എന്ന നയമാണ് സ്വാഭാവികമായി എല്ലാ പരസ്യക്കാരും കൈക്കൊള്ളുക.
		– ഈ ഖണ്ഡികയിൽ നിങ്ങൾ പഠിച്ച ഏതെല്ലാം വിഭക്തികൾക്ക് ഉദാഹരണങ്ങളുണ്ട്?
കു (1)		പ്രതിഗ്രാഹിക (ആളുകളെ)
കു (2)		സംയോജിക (പരിപാടികളോട്)
		കേരളപാണിനീയത്തിൽ വിഭക്തിയെക്കുറിച്ചുള്ള ഭാഗം ഗ്രന്ഥത്തിന്റെ സഹായത്തോടെ ചർച്ചചെയ്യുന്നു.
അ	:	ഈ ഭാഗത്തെന്തെങ്കിലും സംശയങ്ങൾ ഉണ്ടോ?
കു	:	ഇല്ല
അ	:	ശരി

അരത്ഥപൂർണ്ണമായ ആശയ സ്വീകരണം ഉറപ്പാക്കുന്നു

ഗ്രഹിച്ച ആശയം പ്രബലനം ചെയ്യുന്നു

സംശയം ദൂരീകരിക്കുന്നു

LESSON PLAN : ADVANCE ORGANISER MODEL
(ENGLISH VERSION)

Teacher	: C. Bhamini
School	: Govt. Higher Secondary School, Beypore
Class	: IX standard
Subject	: Malayalam
Lesson	: Nominative, objective these cases
Advance organizer	: Case
Time	: 45 minutes

Teaching Objectives

The pupil

1. Relating to the knowledge of case understands the divisions of the case
2. Knows the case suffixes separately (Nominative, objective)
3. Uses the case-suffixes correctly
4. Acquires skill in the usage of language

Nature of Advance organizer : Comparative

Auxiliary system : Written charts of the names of cases, suffixes, examples, Keralapanineeyam

Phase 1 :: PRESENTATION OF ADVANCE ORGANISER

Teacher	:	Today what to be learned are about the peculiarities of the divisions of the case such as Nominative, objective, etc. and about their suffixes.	The objective of the lesson becomes clear
		This is for the meaningful exchange of communication and for acquiring correct knowledge of sentence structure	
Teacher	:	Hope you may know about nouns	
Pupil	:	Sounds that denotes the names	
Teacher	:	Names of what	
Pupil	:	Name of a person or thing or place	
Teacher	:	Give examples for the nouns	
Pupil	:	Raman, Krishnan, Seetha, Flower, Kozhikode, Stone	
Teacher		Haven't you studied about the suffixes?	
Pupil		Yes	Examines the ideas to be executed as subsumer
Teacher		What are suffixes?	
Pupil		Suffixes are those being added to the root of the word to create words	
Teacher	:	Like which is the relationship between the root of the word and suffix that you have learned?	
Pupil		If we consider the root of words as the main root of the tree suffixes are like the branches of that tree	
Teacher		That is to say that suffixes are those that cannot be detached from the root of the word. Can you say example for the suffix?	
Pupil		A, el, oot, nte – all are suffixes	
Teacher		'Mitukkan'- what are the root word and suffix of this word?	
Pupil		Mitukku is root word and An is suffix	
Teacher		Haven't you heard the term case	
Pupil		Yes	

Teacher	What is the relationship between the noun and suffix and the case?	
Pupil	Cases are the suffixes being added to the nouns to reveal the relation of other words to nouns	
Teacher	Can you say an example for adding suffixes in the noun?	Examines the existing structure of knowledge
Pupil	Ramante	
Teacher	In the above word which suffix is added to which noun?	
Pupil	With the noun Rama the suffix 'nte'	
Teacher	If given two words ie. Pasu and Pal, how will you join the noun Pasu to the word Paal?	
Pupil	Pasuvinte paal	
Teacher	Two words such as vellam and natannu. In this how will you join the nown vellam to the verb natannu	
Pupil	Vellathil natannu	
Teacher	Which is the suffix used here?	
Pupil	Il	
Teacher	Raman/Patni/Seetha – How can these nouns be joined meaningfully by adding a sufix?	
Pupil	Ramante patniyanu Seetha	
Teacher	What is meant by the case?	
Pupil	The case is those suffixes added to the nouns to reveal the relation with other words.	
Teacher	CASE B B	

STAGE 2 – PRESENTATION OF THE LEARNING MATERIAL

Teacher : You might have listened of joining suffixes in nouns. Corresponding to the meaning, change comes in the joining suffixes also. Likewise on the basis of suffixes cases are given with a name. Altogether there are seven cases in Malayalam language. Of this, only six number have suffix. The nominative case which is the first case has no suffix. A state of being that itself. That is to say that the noun is being used as such [nominative BB]

According to the principles of standardised segregation presents the sub-contents in order

Ex: Simham Oru mrigamakunnu. Here the noun simham is in thenominative case

Exhibits the chart

Teacher : 'Poocha karanhu' – which is thenoun in the sentence?

Pupil : Poocha

Teacher : Here, does the case used along with the noun?

Pupil : No

Teacher : How is the noun applied?

Pupil : Noun is applied as such. Without suffix

Teacher : Here, in which case is the noun poocha

Pupil : Nominative

Teacher : Can you tell more examples to nominative case

Pupil : Suma kantu

Pupil 2 : Amma atichu

Pupil 3 : Achan paranhu

Pupil 4	:	Rama Kalichu
Pupil 5	:	Aana chinnam vilichu
Teacher	:	The name of the second case is objective case. Its suffix is 'a' (objective BB)
Teacher	:	With regard to suffix what is the difference between Nominative case and objective case?
Pupil 1	:	Nominative case has no suffix
Pupil 2	:	Objective case has suffix
Teacher	:	What is the suffix case has suffix
Pupil	;	Suffix is 'a'
Teacher	:	Ramane kantu – in this which is the suffix added to noun?
Child	:	'a'
Teacher	:	Which is the case applied here?
Child	:	Objective`

Exhibits the chart

Kuttiye Atichu [kutti + a]

Kannane kantu [kannan + a]

Avane nokki [avan +a]

Teacher	:	Of which case' example is shown in the chart?
Pupil	:	Of objective
Teacher	:	Tell more examples for objective case
Pupil 1	:	Achchane kantu
Pupil 2	:	Mantriye kantu
Pupil 3	:	Rajavine kukham kanichu
Pupil 4	:	Seethaye vilichu

Pupil 5	:	Mazhaye sapichu
Teacher	:	The third case is the samyojika
		For case suffix is 'od' (Samyojika BB)
Teacher	:	Can you tell a sentence adding the suffix 'od'
Pupil	:	Kuttikalod chodyam chodichu
Teacher	:	Here to which noun is the suffix added to?
Pupil	:	To 'kutti'
Teacher	:	In the matter of suffix what differentiates objective case from case
Pupil	:	To the objective case the suffix is 'a' But in the case suffix od is being used
Teacher	:	Ramanod paranhu, seethayodu chodichu – which is the suffix in these sentences?
Pupil	:	Od
Teacher	:	Then , which is the case here?
Child	:	Samyojika
Teacher	:	Can you tell another examples for case?
Pupil 1	:	Ravananod yudham chaithu
Pupil 2	:	Kuttikalod paranhu
Pupil 3	:	Ramanod Thottu
Pupil 4	:	Seethayod pinangi

STAGE 3: STRENGTHENING OF COGNITIVE ORGANISATION

Teacher	:	Which is the case having no suffix?
Pupil	:	Nominative case
Teacher	:	Of which case is the suffix a
Pupil	:	Of objective
Teacher	:	Which is the suffix of... case

Pupil	:	Od
Teacher	:	Tell an example for nominative case
Pupil	:	Rajan kantu
Teacher	:	Avane nokki – which is the case in this
Pupil	:	Objective
Teacher	:	Ivalod paranhittu karyamilla – is there a case in this?
Pupil	:	Yes
Teacher	:	What is the name of that case?
Pupil	:	Samyojika
Teacher	:	Give an example for objective case?
Pupil	:	Aanaye kantu
Teacher	:	Give three examples for nominative case
Pupil	:	Suma kantu
Teacher	:	Amma ataichu
Pupil	:	Avan nokki
Teacher	:	What happens when applying the suffic changed?
Pupil	:	Change in the meaning
Teacher		Radiovilum TV yilum. . .	Strengthens the digested ideas

. . . .

. . . .

. . . .

. . . .

In this paragraph whichever cases you studied have examples?

Pupil 1	:	Objective case (Aalukale)	
Pupil 2	:	Samyojika case (Paripatikalod)	Clears the doubt
Teacher	:	Have you any doubts about this portion?	
Pupil	:	No	
Teacher	:	OK	

Appendix VII (a-1)

വയോജന വിദ്യാഭ്യാസ വ്യാപന വിഭാഗം
കോഴിക്കോട് സർവ്വകലാശാല

തയ്യാറാക്കിയത് : ഡോ. കെ കരുണാകരനും ശ്രീമതി. സി. ഭാമിനിയും

സംരചനാ മൂല്യനിർണ്ണയം
(നാമവിഭാഗം)

ആകെ മാർക്ക് 20

I ബ്രാക്കറ്റിൽ നിന്ന് ശരിയുത്തരം തെരഞ്ഞെടുത്തെഴുതുക

1. ദ്രവ്യനാമത്തിന്റെ ഉൾപ്പിരിവിൽ പെടുന്നത്
   [ഗുണനാമം, ക്രിയനാമം, സംജ്ഞാനാമം]

2. ഓടുക - ഏത് നാമവിഭാഗത്തിൽ പെടുന്നു?
   [ദ്രവ്യനാമം, ക്രിയാനാമം, ഗുണനാമം]

3. ജാതിവ്യക്തിഭേദമില്ലാത്ത പദാർത്ഥങ്ങളുടെ പേരുകൾ കുറിക്കുന്ന ശബ്ദമാണ്
   [സംജ്ഞാനാമം, സമൂഹനാമം, മേയനാമം]

4. മലയാളത്തിലെ ആകെ സർവനാമങ്ങളുടെ എണ്ണം
   [18,19,13,16]

5. സംജ്ഞാനാമമല്ലാത്തത് ഏത്
   [കേശവൻ, ഭാരതപുഴ, അമരൻ, കോഴിക്കോട്]   5 X 1 = 5

II പൂരിപ്പിക്കുക

6. ഒരേ ഇനത്തിൽപ്പെട്ട ഒരു കൂട്ടത്തിന്റെ പേരായ ശബ്ദമാണ് _____

7. 'വെൺമ' എന്ന പദം _____ എന്ന നാമവിഭാഗത്തിൽ പെടുന്നു.

8. ദ്രവ്യത്തിന്റെ പേരായ ശബ്ദമാണ് _____

9. സാമാന്യനാമത്തിന് ഒരുദാഹരണമാണ് _____

10. ക്രിയയുടെ പേരായ ശബ്ദമാണ് _____   5 X 1 = 5

III ഒറ്റവാക്കിൽ ഉത്തരമെഴുതുക

11. സർവ്വനാമത്തിന് ഒരു ഉദാഹരണമെഴുതുക

12. ' മനുഷ്യൻ - ദ്രവ്യനാമത്തിലെ ഏത് വിഭാഗത്തിൽപെടുന്നു?

13. 'സംഘം' - ഏത് നാമവിഭാഗമാണ്?

14. 'ഇരുട്ട്' - ഏത് നാമവിഭാഗമാണ്?   4 X 1 = 4

IV രണ്ടു വാക്യത്തിൽ ഉത്തരമെഴുതുക

15. നാമത്തെ എത്ര വിഭാഗമായി തരംതിരിക്കാം? അവയേവ?

16. സർവ്വനാമം എന്നാലെന്ത്?

17. മേയനാമത്തിന് നിർവചനവും ഉദാഹരണവും എഴുതുക.   3 X 2 = 6

Appendix VII (b-1)

സംരചനാ മൂല്യനിർണ്ണയം

നാമവിഭാഗം – ഉത്തരസൂചി

I

1. സംജ്ഞാനാമം
2. ക്രിയാനാമം
3. മേയനാമം
4. 19
5. മനുഷ്യൻ

II

6. സമൂഹനാമം
7. ഗുണനാമം
8. ദ്രവ്യനാമം
9. സമുദ്രം, ഗ്രാമം അങ്ങനെ ഏതെങ്കിലും ഉദാഹരണം
10. ക്രിയാനാമം

III

11. 19 എണ്ണത്തിൽ ഏതെങ്കിലും ഒന്ന്
12. സാമാന്യനാമം
13. സമൂഹനാമം
14. മേയനാമം

IV

15. നാമത്തെ ദ്രവ്യനാമം, ക്രിയാനാമം, ഗുണനാമം എന്നിങ്ങനെ മൂന്നായി തരംതിരിക്കാം. ദ്രവ്യത്തിന്റെ പേരായ ശബ്ദമാണ് ദ്രവ്യനാമം. ക്രിയയുടെ പേരായ ശബ്ദമാണ് ക്രിയാനാമം. ഗുണത്തിന്റെ പേരായ ശബ്ദമാണ ഗുണനാമം.

16. ഒരു നാമം ആവർത്തിക്കുന്നതുകൊണ്ടുള്ള അഭംഗി ഒഴിവാക്കുന്നതിന് ആ നാമത്തിനു പകരം ഉപയോഗി ക്കുന്ന നാമതുല്യപദമാണ് സർവ്വനാമം. 19 എണ്ണത്തിൽ ഏതെങ്കിലും ഉദാഹരണം.

17. ജാതിവ്യക്തി ഭേദമില്ലാത്ത പദാർത്ഥങ്ങളുടെ പേരുകൾ സൂചിപ്പിക്കുന്ന ദ്രവ്യനാമ വിഭാഗമാണ് മേയനാമം ഉദാ : ആകാശം, നിലാവ് അങ്ങിനെ ഏതെങ്കിലും ഉദാഹരണം.

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Appendix VII (a-2)

വയോജന വിദ്യാഭ്യാസ വ്യാപന വിഭാഗം
കോഴിക്കോട് സർവ്വകലാശാല
സംരചനാ മൂല്യനിർണ്ണയം
ക്രിയാ വിഭാഗം

തയ്യാറാക്കിയത് : ഡോ. കെ കരുണാകരനും ശ്രീമതി. സി. ദാമിനിയും

ആകെ മാർക്ക് : 30
സമയം : 45 മിനിറ്റ്

I ബ്രാക്കറ്റിൽ നിന്ന് ശരിയുത്തരം തെരഞ്ഞെടുത്തെഴുതുക.

1 കർത്താവു ചെയ്യുന്ന പ്രവർത്തിയുടെ ഫലം കർത്താവിൽത്തന്നെ തങ്ങുന്നു എന്നുകാണിക്കുന്നവ യാണ്
   (സകർമക ക്രിയ, അകർമക ക്രിയ, കൃത്ത്, പ്രയോജകം)

2 കേവല ക്രിയകളിൽ 'ക്ക്' എന്ന ഇടനില ചേർന്നിട്ടുള്ളത്
   (കാരിതം, അകാരിതം, മുറ്റുവിന, പറ്റുവിന)

3 പൂർണ്ണമായ ക്രിയ
   (വിനയെച്ചം, വ്യോതകം, മുറ്റുവിന, പറ്റുവിന)

4 പറ്റുവിനയെ വിനയെച്ചമെന്നും ബബബബബ എന്നും തിരിക്കാം
   (മുൻ വിനയെച്ചം, പേരച്ചം, പിൻ വിനയെച്ചം, മുറ്റുവിന)

5 രണ്ടു ക്രിയ ഒരേ സമയം നടക്കുന്നുവെന്ന് സൂചിപ്പിക്കുന്ന വിനയെച്ചമാണ്
   (മുൻ വിനയെച്ചം, പിൻ വിനയെച്ചം, തൻ വിനയെച്ചം, പാക്ഷിക വിനയെച്ചം)   5 X 1 = 5

II പൂരിപ്പിക്കുക

6 'ഉറക്കുക' എന്നത് _____ ന് ഉദാഹരണമാണ് (പ്രയോജക ക്രിയ)

7 പേരെച്ചത്തിന് ഒരുദാഹരണമാണ് _____

8 കൃതിക്ക് കീഴടങ്ങി നിൽക്കുന്ന അപൂർണ്ണ ക്രിയയാണ് _____

9 കാലാദിവിശേഷങ്ങളില്ലാത്ത വിനയെച്ചമാണ് _____

10 'ആൻ' പ്രത്യയമുള്ള വിനയെച്ചമാണ് _____   5 X 1 = 5

III ഒറ്റ വാക്കിൽ ഉത്തരമെഴുതുക

11 സകർമ്മകത്തിനൊരുദാഹരണം?

12 'കേട്ട വാർത്ത' ഏതു വിഭാഗത്തിൽപ്പെടുന്നു?

13 നാമത്തിന്നു കീഴടങ്ങി നിൽക്കുന്ന അപൂർണ്ണ ക്രിയ?

14 'മഴ പെയ്താൽ ചൂടു മാറും' - ഏത് വിനയെച്ചമാണ്?   4 X 1 = 4

IV രണ്ടു വാക്യത്തിൽ ഉത്തരമെഴുതുക

15 കേവലം പ്രയോജക ക്രിയകൾ നിർവ്വചിച്ച് ഉദാഹരണം കണ്ടെത്തുക

16 മുൻ വിനയെച്ചത്തിന് 4 ഉദാഹരണങ്ങൾ പറയുക.
    (തുറന്നു വിട്ടു, തള്ളിത്തുറന്നു)

17 മുറ്റുവിന എന്നാലെന്ത്?   3 X 1 = 3

Appendix VII (b-2)

സംരചനാ മൂല്യനിർണ്ണയം

ക്രിയാ വിഭാഗം – ഉത്തരസൂചി

I

1. അകർമ്മകക്രിയ
2. കാരിതം
3. മുറ്റുവിന
4. പേരെച്ചം
5. തൻവിനയെച്ചം

II

6. പ്രയോജകക്രിയ
7. പേരന്റെ ഭാഗമായ ഏതെങ്കിലും അപൂർണ ക്രിയ
8. വിനയെച്ചം
9. നടുവിനയെച്ചം
10. പിൻവിനയെച്ചം

III

11. കർമ്മമുള്ള ഏതെങ്കിലും ഒരു ക്രിയ
12. പേരെച്ചം
13. പേരെച്ചം
14. പാക്ഷികവിനയെച്ചം

IV

15. കർത്താവ് സ്വയം ചെയ്യുന്ന ക്രിയകളാണ് കേവലക്രിയകൾ
    ഉദാ : ഉറങ്ങുന്നു, നടക്കുന്നു (അങ്ങനെ ഏതെങ്കിലും)
    പരപ്രേരണയോടെ ചെയ്യുന്ന ക്രിയകളാണ് പ്രയോജക ക്രിയകൾ
    ഉദാ : ഊട്ടുന്നു, നടത്തുന്നു (അങ്ങിനെ ഏതെങ്കിലും)
16. പ്രധാന ക്രിയയ്ക്കു മുൻപ് നടന്ന അപ്രധാന ക്രിയ സൂചിപ്പിക്കുന്ന വിനയെച്ചം എഴുതണം
17. പൂർണ്ണമായ ക്രിയയാണ് മുറ്റുവിന

Appendix VII (c-1)

വയോജന വിദ്യാഭ്യാസ വ്യാപന വിഭാഗം
കോഴിക്കോട് സർവ്വകലാശാല

ദ്യോതക വിഭാഗത്തിന്റെ തത്വാനുമാനത്തിലും പ്രയോഗപരമായ തിരിച്ചറിവിലും കുട്ടിക്കുള്ള കുറവുകളും പ്രയാസങ്ങളും കണ്ടെത്താനായുള്ള നിദാനശോധകം.

തയ്യാറാക്കിയത് : ഡോ. കെ കരുണാകരനും ശ്രീമതി. സി. ദാമിനിയും

നിർദ്ദേശങ്ങൾ :

1. പാഠഭാഗത്ത് നിങ്ങൾക്കുള്ള പ്രയാസങ്ങൾ കണ്ടെത്താനുള്ളതാണ് ഈ പരീക്ഷ
2. നിശ്ചിത സമയത്തിൽ ഇത് തീർക്കണമെന്ന് നിർബന്ധമില്ല. എങ്കിലും കഴിയുന്നതും വേഗം പൂർത്തിയാക്കണം
3. ഏതെങ്കിലും ചോദ്യത്തിന് ഉത്തരം അറിയുന്നില്ലെങ്കിൽ സമയംകളയാതെ അടുത്ത ചോദ്യത്തിലേയ്ക്ക് കടക്കുക.

താഴെ പറയുന്ന വാക്യങ്ങളിൽ ദ്യോതകങ്ങൾ കണ്ടെത്തി എഴുതുക.

1 രാമനും കൃഷ്ണനും	2 എങ്കിൽ നിനക്കു തെറ്റി	3 അതിൽ നിന്ന് മാറി
4 അദ്ദേഹത്തെക്കുറിച്ച്	5 അങ്ങോളം എത്തണം	6 കോട്ടയം വരെ
7 അവളെപ്പറ്റി പറയേണ്ട	8 ഇവിടെ നിന്ന് പോയി	

താഴെ പറയുന്നവയിൽ നിപാതങ്ങളും അവ്യയങ്ങളും കണ്ടെത്തി എഴുതുക.

9 രാധ എന്ന പെൺകുട്ടി	10 അവനും അവളും	11 അവനോ അവളോ
12 അതേ	13 ഈ മനുഷ്യനും ഞാനും തമ്മിൽ എന്താണ് ബന്ധം	
14 കർണ്ണനും കർമ്മസാക്ഷിയും		

താഴെ പറയുന്നവയിൽ നിന്ന് ഗതി, ഘടകം എന്നിവ കണ്ടെത്തി എഴുതുക.

15 കുടിൽ മുതൽ കൊട്ടാരം വരെ.	16 ഉപ്പു തൊട്ടു കർപ്പൂരം വരെ
17 ലോകത്തിൽ വെച്ച് ഏറ്റവും വലുത്	18 പാക്കിസ്ഥാനും ബംഗ്ലാദേശും
19 പ്ലാറ്റ്ഫോമിൽ നിന്നും പുറത്തേക്ക് കടക്കാൻ തുടങ്ങി.	20 വെറും ചോറോ

വ്യാക്ഷേപങ്ങൾ ഉപയോഗിച്ച് വാചകമാക്കി മാറ്റിയെഴുതുക.

21 എനിക്കു വേദനിക്കുന്നു	22 എന്തൊരാശ്വാസം	23 പട്ടി കടിക്കാൻ വരുന്നു
24 ലോട്ടറി ലഭിച്ചിരിക്കുന്നു	25 വയ്യ	

താഴെ പറയുന്നവയിൽ കേവല ശബ്ദങ്ങൾ ഉണ്ടെങ്കിൽ കണ്ടെത്തുക.

26 രണ്ടോ മൂന്നോ	27 വന്നോ	28 വന്നാൽ
29 വന്നവർക്കേ	30 ഇന്നലെ	

താഴെ പറയുന്ന വാക്യത്തിലെ ഗതി, ഘടകം, വ്യാക്ഷേപകം എന്നിവ കണ്ടെത്തി തരം തിരിച്ചെഴുതുക.

31 അയ്യോ ഇന്നലെയായിരുന്നല്ലോ ദിലീപനും രമേശും വരാമെന്നു പറഞ്ഞിരുന്നത്. അവർ എന്നെ മറന്നോ ദൈവമേ.

Appendix VII (d-1)

നിദാനശോധകം – ദ്യോതക വിഭാഗം

ഉത്തരസൂചി

I

1. ഉം
2. എങ്കിൽ
3. നിന്ന്
4. കുറിച്ച്
5. ഓളം
6. വരെ
7. പറ്റി
8. നിന്ന്

II

9. എന്ന – അവ്യയം
10. ഉം (നിപാതം)
11. ഓ – നിപാതം
12. ഏ – നിപാതം
13. ഉം – നിപാതം
14. ഉം – നിപാതം

III

15. മുതൽ വരെ - ഗതി
16. തൊട്ട വരെ - ഗതി

17. വച്ച് - ഗതി
18. ഉം - ഘടകം
19. ഓ - ഘടകം

IV

20. അയ്യോ!
21. ഹാവൂ!
22. അയ്യോ!
23. ഹാ!
24. കഷ്ടം

V

25. ഓ
26. ഓ
27 ——
28 ഏ
29 ——

VI

30 അയ്യോ - വ്യാക്ഷേപകം

ഉം - ഘടകം

ഓ - ഘടകം

Appendix VII (c-2)

വയോജന വിദ്യാഭ്യാസ വ്യാപന വിഭാഗം
കോഴിക്കോട് സർവ്വകലാശാല

ലോപസന്ധിയുടെ തത്വാനുമാനത്തിലും പ്രയോഗത്തിലും തിരിച്ചറിവിലും
കുട്ടിക്കുള്ള കുറവുകളും പ്രശ്നങ്ങളും പ്രയാസങ്ങളും
കണ്ടെത്താനായുള്ള നിദാനശോധകം

തയ്യാറാക്കിയത് : ഡോ. കെ കരുണാകരനും ശ്രീമതി. സി. ഭാമിനിയും

നിർദ്ദേശങ്ങൾ :

1. ലോപസന്ധിയിൽ നിങ്ങൾക്കുള്ള പ്രയാസങ്ങൾ കണ്ടെത്താനുള്ളതാണ് ഈ പരീക്ഷ.
2. നിശ്ചിത സമയത്തിൽ ഇത് തീർക്കണമെന്ന് നിർബന്ധമില്ല, എങ്കിലും കഴിയുന്നതും വേഗം പൂർത്തിയാക്കണം.
3. ഏതെങ്കിലും ചോദ്യത്തിന് ഉത്തരം അറിയുന്നില്ലെങ്കിൽ സമയം കളയാതെ അടുത്ത ചോദ്യത്തിലേക്ക് കടക്കുക.

1.	കാറ്റ് + ഉണ്ട്		15.	ഇല്ല + എന്ന്
2.	തണ്ണുപ്പ് + ഉണ്ട്		16.	ആയി + എന്ന്
3.	കാട് + ഉണ്ട്		17.	പോയി + എന്ന്
4.	കാറ്റ് + അടിക്കുന്നു		18.	അറിക + എടോ
5.	വിശപ്പ് + ഉണ്ട്		19.	വരിക + എന്ന്
6.	മുട്ട് + ഇല്ല		20.	അറിക + അമരേശ്വര
7.	കണ്ടു + ഇല്ല		21.	ചെന്ന + അവൻ
8.	കണ്ടു + ആൻ		22.	കഴിഞ്ഞ + ആണ്ട്
9.	പറഞ്ഞു + എങ്കിൽ		23.	പല + എടങ്ങളിൽ
10.	കാണുന്നു + ഉണ്ട്		24.	ചില + എടങ്ങളിൽ
11.	കാണുന്നു + ഏൻ		25.	പോട്ടെ + അവൻ
12.	വന്നു + ഇല്ല		26.	വരാതെ + ഇരുന്നു
13.	ഇല്ല + എങ്ങും		27.	ഓടാതെ + ഇരുന്നു
14.	അല്ല + എന്ന്		28.	വരാതെ + ആയി

Appendix VII (d-2)

ലോപസന്ധി – നിദാനശോധകം
ഉത്തരസൂചി

1.	കാറ്റുണ്ട്	15.	ഇല്ലെന്ന്
2.	തണുപ്പുണ്ട്	16.	ആയെന്ന്
3.	കാടുണ്ട്	17.	പോയെന്ന്
4.	കാറ്റടിയ്ക്കുന്നു	18.	അറികെടോ
5.	വിശപ്പുണ്ട്	19.	വരികെന്ന്
6.	മുട്ടില്ല	20.	അറികമരേശ്വര
7.	കണ്ടില്ല	21.	ചെന്നവൻ
8.	കണ്ടാൻ	22.	കഴിഞ്ഞാണ്ട്
9.	പറഞ്ഞെങ്കിൽ	23.	പലെടങ്ങളിൽ
10.	കാണുന്നുണ്ട്.	24.	ചിലെടങ്ങളിൽ
11.	കാണുന്നേൻ	25.	പോട്ടവൻ
12.	വന്നില്ല	26.	വരാതിരുന്ന
13.	ഇല്ലെങ്ങും	27.	ഓടാതിരുന്ന
14.	അല്ലെന്ന്	28.	വരാതായി

Appendix VIII (a)

വയോജന വിദ്യാഭ്യാസ വ്യാപന വിഭാഗം
കോഴിക്കോട് സർവ്വകലാശാല
സിദ്ധിശോധകം – മലയാളം – 2001
തയ്യാറാക്കിയത് : ഡോ. കെ കരുണാകരനും ശ്രീമതി. സി. ഭാമിനിയും

ആകെ മാർക്ക് : 100
സമയം : 1 ½ മണിക്കൂർ

നിർദ്ദേശങ്ങൾ

1. ഗവേഷണത്തിന്റെ ഭാഗമായി ഒൻപതാം ക്ലാസ്സിലേക്കുള്ള മലയാള ചോദ്യാവലി തയ്യാറാക്കുന്നതിനുള്ള ചോദ്യങ്ങളാണ് ഇതിലുള്ളത്.
2. ഈ പരീക്ഷയ്ക്ക് നിങ്ങൾക്ക് കിട്ടുന്ന മാർക്ക് ക്ലാസ്സ് കയറ്റത്തനോ സ്ഥാന നിർണ്ണയത്തിനോ ഉപയോഗിക്കുന്ന തല്ല
3. എല്ലാ ചോദ്യത്തിനും ഉത്തരം എഴുതണം
4. ശരിയായ ഉത്തരം മാത്രം തിരഞ്ഞെടുത്ത് എഴുതിയാൽ മതി.

1. ഒരു നാമത്തോട് ചേർന്നു നിന്നുകൊണ്ട് അർത്ഥം വ്യക്തമാക്കുന്ന അപൂർണ്ണക്രിയയാണ്_____
   (പേരെച്ചം, വിനയെച്ചം, അനുപ്രയോഗം, ദ്യോതകം)
2. ഒരു ക്രിയയോടു ചേർന്നുനിന്നുകൊണ്ട് അർത്ഥം വ്യക്തമാക്കുന്ന അപൂർണ്ണ ക്രിയയാണ്_____
   (പേരെച്ചം, വിനയെച്ചം, അനുപ്രയോഗം, ദ്യോതകം)
3. ഒരു കൃതിക്ക് കീഴടങ്ങിനിൽക്കുന്ന അപൂർണ്ണക്രിയയാണ് _____
   (സകർമ്മകക്രിയ, വിനയെച്ചം, പേരെച്ചം, കൃതികൃത്ത്)
4. ഭാവികാലത്തെ സൂചിപ്പിക്കുന്ന വിനയെച്ചമേത്?
   (മുൻവിനയെച്ചം, തൻവിനയെച്ചം, പിൻവിനയെച്ചം, നടുവിനയെച്ചം)
5. ക്രിയയുടെ ശുദ്ധരൂപമായ വിനയെച്ചമാണ് _____
   (മുൻവിനയെച്ചം, പിൻവിനയെച്ചം, നടുവിനയെച്ചം, തൻവിനയെച്ചം)
6. ശബ്ദത്തെ വാചകമെന്നും _____എന്നും രണ്ടായിത്തിരിക്കാം.
   (ദേദകം, വാക്യം, ദ്യോതകം, നാമം)
7. ഒരു വ്യക്തിയുടേയോ സ്ഥലത്തിന്റെയോ പേരാണ്_____?
   (സാമാന്യനാമം, സംജ്ഞാനാമം, മേയനാമം, സമൂഹനാമം)
8. ഒരു നാമത്തിനു പകരമായി ഉപയോഗിക്കുന്ന നാമമാണ് _____?
   (സംജ്ഞാനാമം, സാമാന്യനാമം, സർവനാമം, മേയനാമം).
9. രണ്ടുക്രിയ ഒരേസമയം നടക്കുന്നു എന്ന് സൂചിപ്പിക്കുന്ന വിനയെച്ചമാണ് _____?
   (മുൻവിനയെച്ചം, പിൻവിനയെച്ചം, തൻവിനയെച്ചം, പാക്ഷികവിനയെച്ചം)
10. പറ്റുവിനയെ വിനയെച്ചമെന്നും, _____ എന്നും തിരിക്കാം
    (മുൻവിനയെച്ചം, പേരെച്ചം, പിൻവിനയെച്ചം, മുറ്റുവിന)
11. വാച്യമായ അർത്ഥമുള്ള ശബ്ദത്തെ _____ എന്നു പറയുന്നു.
    (ദ്യോതകം, വാചകം, ദേദകം, ഇതൊന്നുമല്ല)
12. ദ്യോതകത്തിന്റെ പിരിവുകളാണ് നിപാതവും _____ ഉം.

(വാചകം, ദേദകം, നിപാതം, അവ്യയം.

13. ജാതിവ്യക്തിദേദമില്ലാതെ പദാർത്ഥങ്ങളുടെ പേരുകൾ കുറിക്കുന്ന ശബ്ദം?
(സംജ്ഞാനാമം, സാമാന്യനാമം, മേയനാമം, സമൂഹനാമം)

14. 'ക്ക്' എന്ന ഇടനിലയുള്ള ക്രിയ
(സകർമകം, അകർമകം, കാരിതം, അശാരിതം)

15. വിഭക്തി ആകെ എത്രവിധമാണ് ? (4, 5, 6,7)

16. ഇൽ എന്ന പ്രത്യേയം ഏത് വിഭക്തിയിലുള്ളതാണ്?
(ആധാരിക, സംയോജിക, ഉദ്ദേശിക, സംബന്ധിക)

17. പൂർണ്ണമായ ക്രിയ?
(മുറ്റുവിന, പറ്റുവിന, വിനയെച്ചം, ദ്യോതകം).

18. ഓട് എന്ന പ്രത്യേയം വരുന്ന വിഭക്തി?
(നിർദ്ദേശിക, പ്രതിഗ്രാഹിക, സംയോജിക, ഉദ്ദേശിക).

19. ഉടെ, ന്റെ, എന്നീ രണ്ടു പ്രത്യേയങ്ങളുള്ള വിഭക്തി?
(നിർദ്ദേശിക, പ്രതിഗ്രാഹിക, സംബന്ധിക, ആധാരിക)

20. പ്രത്യേയമില്ലാത്ത വിഭക്തി?
(നിർദ്ദേശിക, പ്രതിഗ്രാഹിക, സംയോജിക, സംബന്ധിക)

21. വർണ്ണങ്ങൾ തമ്മിൽ ചേരുമ്പോൾ ഉണ്ടാകുന്ന മാറ്റത്തിന് പറയുന്ന പേരെന്ത്?
(സന്ധി, സമാസം, വിഭക്തി, വിഭക്ത്യാദാസം)

22. സന്ധിക്കുന്ന വർണ്ണങ്ങൾ ഒന്ന് ഇരട്ടിക്കുന്നത് _____?
(ലോപസന്ധി, ആഗമസന്ധി, ആദേശസന്ധി, ദിത്വസന്ധി)

23. ഘടകപദങ്ങൾക്ക് തുല്യപ്രാധാന്യമുള്ള സമാസം?
(തൽപുരുഷൻ, ഉപമിതസമാസം, ദ്വന്ദ്വസമാസം, ബഹുവ്രീഹി)

24. വർണ്ണങ്ങൾ ചേരുമ്പോൾ അതിലൊന്നു കുറയുന്ന സന്ധി.
(ലോപം, ആഗമം, ആദേശം, ദിത്വം)

25. മധ്യഗുരു വരുന്ന ഗണം (തഗണം, ജഗണം, ഗണം, സഗണം).

26. സമവൃത്തമേത്?
(ഉപജാതി, പുഷ്പിതാഗ്ര, വസന്ദമാലിക, ഇന്ദ്രവജ്ര)

27. സമസ്തപദത്തിനു ശേഷം _____ ചേരില്ല.
(പ്രത്യയം, വിശേഷണം, ചിഹ്നം, ഇതൊന്നുമല്ല).

28. ജതജഗഗ എന്ന ക്രമത്തിൽ വരുന്ന വൃത്തം.
(ഇന്ദ്രവജ്ര, ഉപേന്ദ്രവജ്ര, ഉപജാതി, നതോന്നത)

29. ഇന്ദ്രവജ്രയും ഉപേന്ദവജ്രയും കലർന്നുവരുന്ന വൃത്തം.
(ഇന്ദ്രവംശ, വസന്തതിലകം, ഉപജാതി, വംശസ്ഥം)

30. ഏകധർമത്തിൽ അന്വയിക്കുന്ന അലങ്കാരമേത്?.
(ഉപമ, ഉൽപ്രേക്ഷ, ദീപകം, രൂപകം)

31. അന്ത്യഗുരു വരുന്ന ഗണമേത്?
(സഗണം, തഗണം, രഗണം, നഗണം)

32. ഒരു ധാതുവിനെ സഹായിക്കുന്നതിനായി അതിനുതൊട്ടടുത്ത് പ്രയോഗിക്കുന്ന ധാതുവാണ് _____?
(ദേദകം, വാക്യപ്രയോഗം, പ്രാക്പ്രയോഗം, അനുപ്രയോഗം)

33. അനുപ്രയോഗധാതു ഏത്?
(കൊൾ, ഉന്നു, ആയി, പോയി)

34. അന്യം കൊണ്ടു സമർത്ഥിക്കുന്ന അലങ്കാരമേത്?
(അർത്ഥാന്തരന്യാസം, രൂപകാതികയോക്തി, ദീപകം, അപ്രസ്തുത പ്രശംസ)

35. അനുപ്രയോഗത്തിനു മുമ്പിൽ വരുന്ന ധാതു.
(പ്രയോഗം, പ്രാക്പ്രയോഗം, നാമധാതു, ഖിലധാതു)

36. ഹാ എത്ര ചന്തമാർന്ന ചിത്രം _____ ഇതിലെ ദ്യോതകമേത്?
(എത്ര, ചന്തം, ഹാ, ആർന്ന)

37. പേരെച്ചമേത്?
(നടന്നുകണ്ടു, കണ്ടുനടന്നു, നടക്കുന്ന കുതിര, ഓടിനടന്നു)

38. ഈൗട്ടിപ്രയോജികയിൽ വരുന്ന വാക്യമേത്?
(ഈൗട്ടിയാലുള്ള പെട്ടി, ഈൗട്ടിയുടെ പെട്ടി, ഈൗട്ടിയിൽ ഒരു പെട്ടി, ഈൗട്ടികൊണ്ടുള്ള പെട്ടി)

39. രണ്ടുപേരും വന്നു. ഇതിൽ ഉം എന്നത് _____
(ദ്യോതകം, വാചകം, ക്രിയ, നാമം)

40. അവരെപ്പറ്റി പറയുന്നു. അടിവരയിട്ട പദം ഏതുവിഭാഗത്തിൽപ്പെടുന്നു.
(ഗതി, ഘടകം, വ്യാക്ഷേപകം, കേവലം)

41. പ്രയോജക ക്രിയ ഏത്?
(വലക്കുക, പഠിക്കുക, വഹിക്കുക, വായിക്കുക)

42. ക്രിയാവിശേഷണം ഏത്. (ചെറിയ, ഒരു, സമർത്ഥനായ, ഉറക്കെ)

43. കാരിതം ഏത്‌. (പറയുക, പാടുക, പോവുക, വിളിക്കുക)

44. ഊട്ടുക എന്നത് ഏതുവിഭാഗത്തിൽപ്പെടുന്നു?
(കേവലം, പ്രയോജകം, പേരെച്ചം, വിനയെച്ചം)

45. സൗന്ദര്യം - ഈ പദം ഏതു വിഭാഗത്തിൽപ്പെടുന്നു?
(ദ്രവ്യനാമം, ക്രിയാനാമം, ഗുണനാമം, സർവനാമം)

46. ആകാശം - ഏതു വിഭാഗത്തിൽപ്പെടുന്നു?
(സംജ്ഞാനാമം, സർവനാമം, മേയനാമം, സാമാന്യനാമം)

47. ഉപ്പുതൊട്ടു കർപ്പൂരം വരെ. അടിവരയിട്ട പദങ്ങൾ ഏതുവിഭാഗത്തിൽപ്പെടുന്നു?
(ഗതി, ഘടകം, വ്യാക്ഷേപകം, സാമാന്യം)

48. അകാരിതമേത്?
(പറയുക, മറക്കുക, ഓടിക്കുക, കാണിക്കുക)

49. ഗതി ഏത്?
(മുതൽ, എന്ന്, ഉം, ഓ, ഓഹോ)

50. കേവലക്രിയക്ക് ഉദാഹരണം?
(പഠിക്കുന്നു, ഉറക്കുന്നു, പഠിപ്പിക്കുന്നു, നടത്തിക്കുന്നു)

51. അയാൾ പെട്ടെന്ന് കണ്ണുതുറന്ന് എഴുന്നേറ്റ് സഞ്ചി എടുത്ത്. അടിവരയിട്ടതിൽ ക്രിയാപദം അല്ലാത്തത്
ഏത്? (പെട്ടെന്ന്, തുറന്ന്, എഴുന്നേറ്റ്, എടുത്ത്).

52. നല്ല എന്ന പദം ഏത് വിഭാഗത്തിൽപ്പെടുന്നു? (നാമ, ക്രിയ, ദേദകം, നിപാതം).

53. വരാൻ കഴിഞ്ഞില്ല - അടിവരയിട്ട പദം ഏത് വിഭാഗത്തിൽപ്പെടുന്നു?
(മുൻവിനയെച്ചം, തൻവിനയെച്ചം, പിൻവിനയെച്ചം, പാക്ഷികവിനയെച്ചം)

54. പേരെച്ചത്തിന് ഉദാഹരണം?
(വന്നസമയം, പറഞ്ഞുകേട്ടു, വന്നാൽകാണാം, ചാടിപ്പോയി)

55. മനുഷ്യൻ എന്ന പദം ഏത് വിഭാഗത്തിൽപ്പെടുന്നു?
(സംജ്ഞാനാമം, ഗുണനാമം, സാമാന്യനാമം, സർവനാമം)

56. വരാതെ + ആയി ഏതു സന്ധി
(ലോപം, ആദേശം, ആഗമം, ദ്വിത്വം)

57. പറഞ്ഞെങ്കിൽ - ഏത് സന്ധി?
(ലോപസന്ധി, ആദേശസന്ധി, ആഗമസന്ധി, ദ്വിത്വസന്ധി)

58. സംബന്ധികാവിഭക്തിക്ക് ഉദാഹരണം ഏത്?

74. തൃക്കാൽക്കൽ വീണീടിന ശിഷ്യനേയും
കൃത്താംഗനായിത്തീർന്ന തനുജനേയും
കാരുണ്യ വാത്സല്യ കഷായമായ
കണ്ണാൽ നിരീക്ഷിച്ചു കലേശചൂഡൻ - വൃത്തമേത്?
(ഉപജാതി, ഉപേന്ദ്രവജ്ര, ഇന്ദ്രവജ്ര, മഞ്ജരി)

75. കൈലാസശൃംഗങ്ങളിൽ ഒന്നിനൊപ്പം - വൃത്തം നിർണ്ണയിക്കുക?
(ഇന്ദ്രവജ്ര, ഉപേന്ദ്രവജ്ര, ഉപജാതി, ഇവയൊന്നുമല്ല)

താഴെ പറയുന്നവയിൽ കൂട്ടത്തിൽ ചേരാത്തത് ഏത്?

76. (രാജാവ്, ഊട്ട്, ചെടി, എള്ള്)

77. (വെച്ച്, കൊണ്ട്, ഉം, നിന്ന്)

78. ഇരുന്നു എന്നതിന് ഇരിക്കുക എന്ന ക്രിയയുടെ അർത്ഥം വരുന്നത് എവിടെ?
(സന്യാസി തന്റെ ഇരിപ്പിടത്തിൽ വന്നിരുന്നു,
അദ്ദേഹത്തിന്റെ കൂടെ വന്നവർ നിന്നതേയുള്ളൂ,
രണ്ടുപേർ അദ്ദേഹത്തെ കാത്തുനിന്നിരുന്നു
ഇന്നലെ അദ്ദേഹം ആശ്രമത്തിൽ ചെന്നിരുന്നു)

79. കൃഷ്ണ എന്ന പദം ദ്യോതകമായി പ്രയോഗിച്ചിട്ടുള്ളത് ഏതിൽ?
(പാഞ്ചാലി കൃഷ്ണാ എന്നു വിളിച്ചുകരഞ്ഞു,
കൃഷ്ണാ നീയെന്തുപണിയാ പറ്റിച്ചത്
കൃഷ്ണാ ഇത്തവണയും പരീക്ഷയിൽ രക്ഷപ്പെട്ടില്ലല്ലോ
കൃഷ്ണാ ശ്രദ്ധിച്ചുപഠിച്ചാൽ ഇത്തവണ പരീക്ഷയിൽ ജയിക്കാം).

80. ചെറുപ്പകാലങ്ങളിലുള്ള ശീലം
മറക്കുമോ മാനുഷനുള്ളകാലം
കാരസ്കരത്തിൻ കുരു പാലിലിട്ടാൽ
കാലാന്തരേ കയ്പ് ശമിപ്പതുണ്ടോ - വൃത്തമേത്?
(ഉപജാതി, ഉപേന്ദ്രവജ്ര, രഥോദ്ധത, ഇന്ദ്രവജ്ര)

81. ചുവന്ന ചന്ദ്രക്കലപോൽ വളഞ്ഞും
വിളങ്ങി പൂമൊട്ടുടനെ പിലാശിൽ - വൃത്തമേത്?
(ഇന്ദ്രവജ്ര, ഉപേന്ദ്രവജ്ര, ഉപജാതി, കാകളി)

82. അനന്തരത്നപ്രഭയാവിചിത്ര
മനന്തനാഗസ്യ ഫണാസമൂഹം - വൃത്തമേത്?
(രഥോദ്ധത, ഉപജാതി, ഇന്ദ്രവജ്ര, ഉപേന്ദ്രവജ്ര).

83. അപേക്ഷിച്ചുകൊള്ളുന്നു - പതിവുസൂചിപ്പിക്കുന്ന അനുപ്രയോഗമാക്കി മാറ്റുക.
(അപേക്ഷിച്ചുപോയി, അപേക്ഷിച്ചു, അപേക്ഷിച്ചുപോരരുന്നു, അപേക്ഷിച്ചില്ല)

84. ഭക്തപ്രിയത്താൽ ഭഗവാനുമങ്ങ-
സ്സൽക്കാരമേൽക്കാനുടനെ തുനിഞ്ഞാൽ
(ഇന്ദ്രവജ്ര, ഉപേന്ദ്രവജ്ര, ഉപജാതി, വസന്തതിലകം)

85. (ചേർക്കുന്നു, വളർത്തുന്നു, അകറ്റുന്നു, നടക്കുന്നു) കൂട്ടത്തിൽ ചേരാത്തത് ഏത്?

86. എന്നാകിലും ഞാനിഹ ചെന്നുപോരാം
തന്നാകിലോ ഞാനതുകൊണ്ടുപോരാം - വൃത്തമേത്?
(ഇന്ദ്രവജ്ര, ഉപേന്ദ്രവജ്ര, ഉപജാതി, രഥോത്ഥത)

87. (ഉറങ്ങി, ഉയർത്തി, വിളിച്ചു, പറഞ്ഞു) കൂട്ടത്തിൽ ചേരാത്തത് ഏത്?

88. ദ്യംഗാനനചാർത്തൊടു ചേർത്തു ചാർത്തി
മുഖത്തിലോമൽത്തിലകം മധുശ്രീ - വൃത്തം നിർണ്ണയിക്കുക?

(ഇന്ദ്രവജ്ര, ഉപേന്ദ്രവജ്ര, ഉപജാതി, കാകളി).

89. കൂട്ടത്തിൽ ചേരാത്തത് ഏത്?
(ന്റെ, ഉടെ, ഊടെ, ൽ)

90. (വീഴ്ച, ചാട്ടം, അിറവ്, പുതുമ) കൂട്ടത്തിൽ ചേരാത്തത് ഏത്?

91. രാമൻ കടയടച്ച് രാമന്റെ കുടയെടുത്ത് വേഗം നടന്നു -
അടിവരയിട്ട പദത്തിന് പകരം സർവനാമം പ്രയോഗിക്കുക.
(തന്റെ, അയാളോട്, വേഗത്തിൽ, രാമനാൽ)

92. ലോപസന്ധിയല്ലാത്തത് ഏത്?
(വിശപ്പുണ്ട്, അല്ലെന്ന്, ഇല്ലെങ്കിൽ, പൊൽപ്പൂ).

93. ഇഷ്ടപ്രാണേശ്വരിയുടെ വിയോഗത്തിനാലും നരേന്ദ്ര
ദിഷ്ടത്വത്താലൊരുവനുളവാം മാനനഷ്ടത്തിനാലും -
കഷ്ടപ്പെട്ട പുരുഷനൊരു നാലഞ്ചുകൊല്ലം കഴിച്ചാൻ
ദിഷ്ടക്കേടാൽ വരുവതു പരിഹാരമില്ലാത്തതല്ലോ- അലങ്കാരം ഏത്?
(അർത്ഥാന്തരന്യാസം, ഉപമ, മാലോപമ, ഉൽപ്രേക്ഷ)

94. അച്ഛനുമമ്മയും കോഴിക്കോട്ടേക്കുപോയി -
അടിവരയിട്ട പദത്തിന് പകരമായി ദ്വന്ദ്വസമാസം വരുന്ന മറ്റൊരു പദം പ്രയോഗിക്കുക.
(അച്ഛനും അമ്മയും, അമ്മയുമച്ഛനും, അച്ഛനമ്മമാർ, അച്ഛനോ അമ്മയോ)

95. ദ്വന്ദ്വസമാസമല്ലാത്തത്
(പാൽപൂഞ്ചിരി, ദിനരാത്രങ്ങൾ, സുര്യചന്ദ്രന്മാർ, മാതാപിതാക്കൾ)

96. ദ്വിത്വസന്ധിക്ക് ഉദാഹരണമല്ലാത്തത്
(മരം + ഇൽ, അ + കാലം, ഇ + തടി, എ + മട്ട്)

97. പാലൊത്തെഴും പുതിനിലാവിലലം കുളിച്ചും
ബാലാതപത്തിൽ വിളയാടിയുമാടലെന്യേ
നീ ലീലപൂണ്ടിളയമൊട്ടുകളോടു ചേർന്നു
ബാലത്വമങ്ങനെ കഴിച്ചിതു നളിൽ നാളിൽ
അലങ്കാരമെന്ത്?
(സ്വഭാവോക്തി, അർത്ഥാന്തരാന്യാസം, ഉൽപ്രേക്ഷ, ഉപമ)

98. നിന്റെയലിവും അമർത്തുന്ന
രോഷവും ഇരുട്ടത്തു
വരവും തനിച്ചുള്ള
തേങ്ങിക്കരച്ചിലും
പുലരിയെത്തുമ്പോൾ
മുഖം തുടച്ചുള്ള നിൻ-
ചിരിയും തിടുക്കവും
നാട്യവും ഞാനറിയും; - അലങ്കാരം നിർണ്ണയിക്കുക?
(സ്വഭാവോക്തി, അർത്ഥാന്തരാന്യാസം, ദീപകം, കാവ്യലിംഗം)

99. പ്രേമത്തിൻ തിളക്കം കണ്ടതു ചെന്നെടുക്കായ്വിൻ
ദീമമാം ഖഡ്ഗത്തേക്കാൾ മൂർച്ചയേറിയതത്രേ - അലങ്കാരമെന്ത്?
(സാവദാവോക്തി, കാവ്യലിംഗം, അർത്ഥാരന്യാസം, ദീപകം)_____?

100. ഇന്നുനിൻ സൗന്ദര്യത്തെപ്പൂർണ്ണമായ് കാണുന്നി-
ന്നതിൻ പ്രേമം മൂലമെൻമനം പിളരുന്നു - അലങ്കാരമെന്ത്?.
(സ്വഭാവോക്തി, വിരോധധാഭാസം, ശ്ലേഷം, ദീപകം)

Appendix VIII (b)

Achievement Test

ഉത്തരസൂചി

1	പേരെച്ചം	36.	ഹാ	70.	സൂക്ഷ്മസ്വഭാവം വർണ്ണിച്ചി രിക്കുന്നു
2.	വിനയെച്ചം	37.	നടക്കുന്ന	71.	ശ്ലേഷം
3.	വിനയെച്ചം	38.	ഈട്ടിയാലുള്ള പെട്ടി	72.	വിരോധാഭാസം
4.	പാക്ഷിക വിനയെച്ചം	39.	ദ്യോതകം	73.	ഉപജാതി
5.	നടുവിനയെച്ചം	40.	ഗതി	74.	ഇന്ദ്രവജ്ര
6.	ദ്യോതകം	41.	വലയ്ക്കുക	75.	ഉപേന്ദ്രവജ്ര
7.	സംജ്ഞാനാമം	42.	ഉറക്കെ	76.	ഊട്ട്
8.	സർവ്വനാമം	43.	വിളിയ്ക്കുക	77	ഉം
9.	തൻവിനയെച്ചം	44.	പ്രയോജകം	78.	സന്ന്യാസി തന്റെ ഇരിപ്പിട ത്തിൽ വന്നിരുന്നു
10.	പേരെച്ചം	45.	ഗുണനാമം	79.	പാഞ്ചാലി കൃഷ്ണാ എന്നു വിളിച്ചു കരഞ്ഞു
11.	വാചകം	46.	മേയനാമം	80.	ഉപജാതി
12.	അവ്യയം	47.	ഗതി	81.	ഇന്ദ്രവജ്ര
13.	മേയനാമം	48.	പറയുക	82.	ഇന്ദ്രവജ്ര
14.	കാരിതം	49.	മുതൽ	83.	അപേക്ഷിച്ചുപോരുന്നു
15.	7	50.	പഠിക്കുന്ന	84.	ഉപേന്ദ്രവജ്ര
16.	ആധാരിക	51.	പെട്ടെന്ന്	85.	അകറ്റുന്നു
17.	മുറ്റുവിന	52.	ദേഭകം	86.	ഉപേന്ദ്രവജ്ര
18.	സംയോജിക	53.	പിൻവിനയെച്ചം	87.	ഉറങ്ങി
19.	സംബന്ധിക	54.	വന്നസമയം	88.	ഉപജാതി
20.	നിർദ്ദേശിക	55.	സംജ്ഞാനാമം	89.	ഈൗടെ
21.	സന്ധി	56.	ലോപസന്ധി	90.	പുതുമ
22.	ദ്വിതിസന്ധി	57.	ലോപസന്ധി	91.	തന്റെ
23.	ദ്വന്ദ്വസമാസം	58.	ഉടെ	92.	പൊൽപ്പൂ
24.	ലോപസന്ധി	59.	വിഭക്തി പ്രത്യയം	93.	അർത്ഥാന്തരന്യാസം
25.	ജഗണം	60.	എ + മാതിരി	94.	അച്ഛനമ്മമാർ
26.	ഇന്ദ്രവജ്ര	61.	സംബന്ധിക	95.	പാൽപുഞ്ചിരി
27.	പ്രത്യയം	62.	കൈയും കാലും	96.	മരം + ഇൽ
28.	ഉപേന്ദ്രവജ്ര	63.	ആധാരിക	97.	സ്വഭാവോക്തി
29.	ഉപജാതി	64.	നിഷേധാന പ്രയോഗം	98.	ദീപകം
30.	രൂപകം	65.	ആദ്യഗണത്തിലെ ഗുരു ലഘുവാകുന്നു.	99.	കാവ്യലിംഗം
31.	സഗണം	66.	ഇന്ദ്രവജ്ര	100.	വിരോധാഭാസം
32.	അനുപ്രയോഗം	67.	അതിശയോക്തി		
33.	കൊൾ	68.	പൂരാണാനുപ്രയോഗം		
34.	അർത്ഥാന്തരന്യാസം	69.	പതിച്ചു		
35.	പ്രാക്പ്രയോഗം				

APPENDIX VIII (c)

UNIVERSITY OF CALICUT
DEPARTMENT OF ADULT AND CONTINUIJNG EDUCATION AND
EXTENSION SERVICES

Achievement Test in Malayalam (Draft)

prepared by: Dr.K.Karunakaran and Smt. C. Bhamini

Marks: 100
Time : 1 ½ hrs.

1   . . . . is a non finite verb which adjoining with a noun reveals the meaning

[Adjective participle, Adverbial participle, Anuprayogam indicative]

2   . . . . is a non-finite verb which adjoining with a verb reveals the meaning

[Adjective participle, Adverbial participle, anuprayogam indicative]

3   . . . . is a nonfinite verb surrounding to a verb

[transitive verb, adverbial participle, adjective participle (verbal noun)]

4   Which is the adverbial participle that denotes future tense

Adverbial past participle, adverbial. . . . . .

Adverbial future participe, Adverbial. . . . . .

5   . . . . is the adverbial participle which is the simple form of verb

Adverbial past participle, adverbial future participle adverbial. . . . . . .Adverbial]

6   Speech (sound) can be sorted into two such as . . . ..and sentence

[Article, clause, indicative, noun]

7   . . . . is then ame of a person or a place

[Common noun, proper noun, abstract noun, collective noun]

8   . . . . is the noun being used instead of a noun

[Proper noun, common noun, pronoun, abstract noun]

9   . . . . is the adverbial participle indicating that two acts are carrying out at the same time

[Adverbial past participle, adjective participle, adverbial future participle, ...]

10 .... Can be classified into adverbial participle and. . . . .

[Adverbial past participle, Adjective participle, Adverbial future, participle]

11 The speech (sound) possessing revealed meaning is called as. . . .

[indicative, vachakam' article, not this

12 Nipatham and . . . . are branches of indicative

[sentence, article, nipatham, avyayam]

13 .... is the word that denotes the names of things without differentiating person and kind

[proper noun, common noun, abstract noun, collective noun]

14 The verb possessing intermediary 'kku'

[Transitive verb, intransitive verb, karitham, akaritham]

15 Altogether how many types are the case?

[4, 5, 6, 7]

16 Under which group is the suffix 'ell'

[Locative, Samyojika, Dative, possessive]

17 Which is the complete verb

[Finite verb, Adverbial participle, indicative]

18 The case in which the suffix oot comes

[nominative, objective, samyojika, possessive]

19 The case having two suffixes ute and inte

[Nominative, objective, possessive, locative]

20 The case without suffix

[Nominative, objective, samyojika, possessive]

21 What is the name of the alteration which happens when alphabets unite

[Conjuncture, composition of words, case, vibhakthyabhasu

22 One of the alphabets doubles when united ....

[Lopa, Aagama, Audesha, Dwitwa

23 The composition of words having equal importance for component words

[Thalpurushan, Upanitasamasam, Dwantasamasam, Bahuvruhi]

24 The conjuncture in which one alphabet decreases when the alphabets unite

Lopa, Aagama, Aadesha, Dwitwa

25   The sound unit in which the mid long vowel sound comes

Jha,Ja, Bha, sa

26   Which is the metre having equal quadrant

Upajathi, Pushpithagra, Vasanthamalika, Indravajra

27   After the word..d.d.d.d will not suit

[Suffix, viseshanam sigh, not this]

28   The metre in which the sound unit comes in the order Ja Jha Ja Ga Ga

Indravajra, Upendravajra, Upajathi, Nathonnatha

29   The metre in which indravajra and upendravajra come mixed by

Indravamsa, vasanthathilakam, upajathi, vamsastham

30   The figure of speech that connects in single property

[Simile, Utpreksha, Deepakam, metaphor]

31   Which is the sound unit in which comes the last-long vowel sound?

Sa, Jha, Ra, Na

32.   . . . . . root word being used for helping a root word contiguous of it.

[Article, vakyaprayogam, prakprayogam, anuprayogam]

33   Which is the Anuprayoga root

Ko! Unnu, Aayi, Poyi

34   Which is the figure of speech that is stated with 'another'

[Arthantharanyasam, roopakathisayokthi, deepakam, aprasthutha prasamsa

35   The root of word that comes before

][Voice, prakprayogam, nama dhatu, khiladhatu]

36   Ha, Ethra chandramarna chithram – which is theindicative in this?

[Ethra, chandam, Ha, Aarnna]

37   Which is the Adjective participle?

[Natannukantu, kantunatannu, natakkunna kuthira, otinatannu

38   Eetti—which is the sentence that comes in the ablative case?

[Eethiyalulla petti, Eettiyude petti, eeettiyil oru petti, Eettikondula petty

39   Randuperum vannu – in this 'um' is. . . .

[indicative, sentence, verb, noun'

40   Avareppatti parayunnu—in which section comes the underlined word

[preposition, conjunction, exclamation, interjection]

41   Which is the ablative verb

[Valakkuka, padtikkuka, vahikkuka, vayikkuka]

42   Which is the adverb?

[Cheriya, oru, samarthanaya, urakke

43   Which is karitham

[parayuka, patuka, povuka, vilikkuka]

44   In which section comes Oottuka

[kevalam, Ablative, Adjective particpel, Adverbial participle]

45   Soundaryam – under which section this word falls?

[Material noun, verbal noun, noun of quality, pronoun]

46   Aakasam – under which section comes this word?

[proper noun, pronoun, abstract noun, common noun]

47   Uppu thottu karpooram vare – under whichsection comes the underlined words?

Preposition, conjunction, interjection, common

48   Which is akaritham

[Parayuka, Marakkuka, ootikkuka, kanikkuma]

49   Whichis preposition?

[Muthal,annu, um, o, oho]

50   Which is the example for

Patdikkunnu, vrakkunnu, ptdippikkunnu,ntattikkunnu

51   Ayal pettennu kannu thurannu ezhunnettu sanchi eduthu. In the underlined words which is the verbal word?

Pettennu, thurannu, ezhunnettu, eduthu

52   In which section comes the word 'nalla'.

Noun, verb, article, nipatham

53 Varan kazhinjilla – in which section comes the underlined word.

Adverbial past participle,…. Adverbial future participle,….

54 Anexample for adjective participle,

[vana, vannu, chati, vannal]

55 Under which section comes the word 'Manushyan'

[proper noun, quality noun, common noun, pronoun]

56 Varathe +aayi – whichis the juncture?

[Lopam, aadesham, aagamam, dwitwam]

57 Paranju + Engil – which is the juncture?

Lopam, Aadesham, Aagamam, Dwitwam

58 Which is example for the possessive case

[Radhayude, Radhaye, Radhayod, Radhakku]

59 Ninakku vendiyanu nhan kashtappetunnathu under which section comes the underlined word?

[interjection, preposition, case, suffix, conjunction]

60 The case without relation of. . .

[possessive, samyojika, objective, locative]

61 The case without relation of . . . .

[possessive, samyojika, objective, locative]

62 Kaikalukal How will the word be separated

[Kaikalum, kalukalum, kaiyum kalum, kaikalum kalum, kalum kaikalum]

63 Kannur Enna Sthaalathanu nhan janichathu. Instead of 'enna sthalathu' which case could be used?

[nominative, locative, objective, dative]

64 'yudham cheyyaruthu' which section of is this

[kalanu prayogam, bhedakanuprayogam, poornanuprayogam, nizhedhanuprayogam]

65 When the inetre indravajra transfers to upendravajra the change that comes. The first long vowel sound of the first word unit becomes short vowel sound, the first short vowel sound of the first sound unit becomes long vowel sound;

The mid short vowel sound of the first sound unit becomes long vowel sound; The last short vowel sound of the first sound unit becomes long vowel sound.

66   Athranthare garga maha muneendran – identify the metre

[Indravajra, upendravajra, upajathi, rathodhatha]

67   Under which section comes the figure of speech virodhabhasam

[samyokthi, athisayokthi, vasthavakthi, sleshokthi]

68   Innu phalaprakhyapanam undavum – whichis the section of

Bhedakanuprayogam. . . . .

69   Ramayudham Bheemasuthante vama

Gandtasthalathil thara sapathichu

Akkumbhivakthranteyidathukompo

Nirghathaghoraravamayi nilathum

Here, the figure of speechdeepaka is due to

Ramayudhan, pathichu, kompo, nilathum

70   Skandan thada punchiriyittu nandi

Kanchinni veesee gada veerabhadran

Veerponnu vittoo rurukai thirummi

Kundtodharan navukatichu chandan

Here,

It was told combined with contradiction; subtle character is depicted; stated with another; connected in the single property

71   Basic components for the figure of speech dependent on the sense are exaggeration,similarity, reality

[Simile, embellishment, amphiboly sound

72   The fiture of speech that appear to suggest contribution in its first hearing

[simile, utpreksha, virodhabhasam, deepakam]

73   Kapolabhithikshathasonithathal

Kashmeerakam charthiya kunchithasyan,

Anthichukpappesiye saradabram

Pole vilangi sphatikavadatan

Which is the metre?

[Upajathi, upendravajra, indravajra, No metre]

74   Thrikkalkal veeneetina sishyaneyum

Krithanganayitheernna Thanujaneyum

Karunyavalsalya kashayamaya

Kannal nereekshichu kaleshachoodan

Which is the metre?

Upajathi, Upendravajra, indravajra, Manjare

75   Kailasasringangalil onninoppam

Determine the metre

Indrvajra, upendravajra, upajathi, not this

76   In the following which is that dissociating in the group?

[King, Oottu, plant, sesamum]

77   (Vechu, kontu, um, ninnu – preposition

78   For 'Irunnu' where does the meaning of the verb 'irikkuka' come?

Samnyasi thante irippidathil vannirunnu

Addhethinte koote vannavar ninnatheyullu

Rantuper Addehathe kathuninnirunnu

Innale addeham asramathil chennirunnu

79.   Where is the word krishna used as indicative

Panchali Krishna ennu vilichukaranju

Krishna neeyenthu paniya pattichathu?

Krishna ithavanayum pareekshayil rakshappettillallo.

Krishna sradhichupadichal ithavana pareekhayil jayikkan

80.   Cheruppakalangalilulla seelam

Marakkumo manushanulla kalam

Karasherathin kuru palilittal

Kalanthare kaypu samippathundo?

Whichis the metre?

Upajathi, Upendravajra, Rathodhatha, Indravajra

81   Chuvannu chandrakkalapol valanju,

Vilangi premottudane pilashil

Which is the metre?

{ Indravajra, upendravajra, upajathi, kakali]

82 Anantharatnaprabnhayavichithra

Mananthanagasya phanasamooham

Which is the metre?

[Rathodhatha, Upajathi, Indravajra, Upendravajra]

83 Apekshichukollunnu—change into

That indicates the custom

Apekhichupoyi, Apekshichu, Apekshichuporunnu, Apekshichill

84 Bhakthapriyathal Bhagavanumanga

Ssalkkarmelkknudane thuninjal

[Indravajra, upendravajra, upajathi, vasanthatilakam]

85 Cherkkunnu, valarthunnu, Akattunnu, Natakkunnu

86 Ennakilum nhaniha chennu poram

Thannakilo nhanathu kontuporam

Which is the metre,I

ndravajra, Upendra vajra, Upajathi, Rathodhata

87 Urangi, Uyarti, Vilichu,Paranju

Intransitive verb

88 Bhringanjana charthodu cherthu charthi,

Mukhathilomalthhilakam Madhusree

Determine the metre

Indravajra, Upendravajra, upajathi,Kakali

Identify that not associating with the group

89 Nte, ute, oote, el

90 Veezhcha, chattam, Arivu, puthuma

91 Raman katayatachu Ramante kutayeduthu vegam natannu

Use pronoun instead of the underlined word

Thante, Ayalodu, vegathil, ramanal

92 Which is the juncture that is not lopa

Visappuntu, allennu, illengil, polppoo

93   Ishtapraneswariyute viyogathinalum narendra

Dishtathwa tha loruvanulavam mananashtathinalum

Kashtappetta purushanoru nalanchu kollam kazhichal

Dishtakketal varuvathu pariharamillathathallo

--which is the figure of speech

Arthantharanyasam, upama, malopama, ulpreksha

94   <u>Achanumammayum</u> Kozhikkottekku poyi. Instead of theunderlined word use another word of Dwantwasamasom

]Achanum Ammayum, Ammayum Achanum, Achanammamar, Achano Ammayo]

95   That whichis not dwanthwa samasam

Palpunchiri,dinarathrangal,sooryachandranmar

Mathapithakkal

96   That whichis not an example for Dwitswasandhi

Maram +il, A + kalam, e + thati, a + mattu

97   Palathezhum poothinilavilalam kulichum

Balathapathil vilayatiyumatalanye

Nee leela poontilaya mottukalotu chernnu

Balatwamangane kazhichitu nalil nalil

Identify the figure of speech?

Swabhavokthi, Arthan tharanyasam, Ulpreksha,simile

98.   Ninteyalivum amarthunna

Roshavum eruttathu

Varavum thanichulla

Thengikkarachilum

Pulariyethumbol

Mukham Thutachulla nin

Chiriyum thitukkavum

Natyavum nhanariyum

Determine the figure of speech

Swabnhavokthi, Arthantharanyasam, deepakam, Kavyalingam.

99   Premathinthilakkam kantathu chennetukkayvin

Bheemamam khadgathekkal moorchayariyathatre

Determine the figure of speech

Swabhavokthi, Kavyalingam, Arthantharanyasam, Deepakam

100   Innu ninsoundaryatheppoornamayi kanunni

Thinnathin premam moolamennum pilarunnu

What is the figure of speech?

Swabhavokthi, virodhabhasam, Amphiboly, Deepakam.

ACHIEVEMENT TEST (DRAFT) ENGLISH VERSION - ANSWER KEY

1	Adjective participle	35	Prak prayogam	69	Pathichu
2	Adverbial participle	36	Ha	70	Character is depicted
3	Adverbial participle	37	Nadakkunnu	71	Amphiboli
4	Pakshika vinayacham	38	Eetttiyalulla petti	72	Viroddhabhasam
5	Future participle	39	Dyotakam	73	Upajathi
6	Indicative	40	Preposition	74	Indravajra
7	Proper noun	41	Valakkunnu	75	Upendravajra
8	Pronoun	42	Urakke	76	Ootu
9	Adverbial future participle	43	Vilikkuka	77	Um
10	Adjective participle	44	Prayojakam	78	Sanyasi thante irippidathil vannirunnu
11	Vachakam	45	Noun of quality	79	Panchali krishna ennu vilichu karanju
12	Avyayam	46	Abstract noun	80	Upajathi
13	Abstract noun	47	Preposition	81	Indravajra
14	Karitham	48	Parayuka	82	Indravajra
15	7	49	Muttal	83	Apekshichuporunnu
16	Locative	50	Padikkunnu	84	Upendravajra
17	Finite verb	51	Pettennu	85	Akattunnu
18	Samyojika	52	Article	86	Upendravajra
19	Possessive case	53	Adverbial future participle	87	Uranghi
20	Nominative case	54	Vannasamayam	88	Upajathi
21	Conjuncture	55	Proper noun	89	Oote
22	Dwithwam	56	Lopam	90	Putuma
23	Dwanthasamasam	57	Lopam	91	Tante
24	Lopam	58	Radhayude	92	Polppu
25	J A	59	Case suffix	93	Arthantharanyasam
26	Indra vajra	60	A + Mathiri	94	Achanum ammayum
27	Suffix	61	Possessive	95	Pal punchiri
28	Upendra vajra	62	Kayyum kaalum	96	Maram + il
29	Upajathi	63	Locative	97	Swabhavokti
30	Deepakam	64	Neshadanuprayogam	98	Dweepakam
31	SA	65	The first long vowel of the first word unit become short vowel sound	99	Kavyalingam
32	Anuprayogam	66	Indravajra	100	virodhabhasam
33	Kol	67	Adisayokthi		
34	Arthandaranrayasam	68	Poorananuprayogam		

Appendix IX (a)

വയോജന വിദ്യാഭ്യാസ വ്യാപന വിഭാഗം

കോഴിക്കോട് സർവ്വകലാശാല

സിദ്ധിശോധകം – മലയാളം – 2001

തയ്യാറാക്കിയത് : ഡോ. കെ കരുണാകരനും ശ്രീമതി. സി. ഭാമിനിയും

ആകെ മാർക്ക് : 66

നിർദ്ദേശങ്ങൾ

1. ഈ പരീക്ഷയ്ക്ക് നിങ്ങൾക്ക് കിട്ടുന്ന മാർക്ക് ക്ലാസ്സ് കയറ്റത്തനോ സ്ഥാന നിർണ്ണയത്തിനോ ഉപയോഗിക്കുന്നതല്ല
2. എല്ലാ ചോദ്യത്തിനും ഉത്തരം എഴുതണം
3. ശരിയായ ഉത്തരം മാത്രം തിരഞ്ഞെടുത്ത് എഴുതിയാൽ മതി.

1. ഒരു കൃതിക്ക് കീഴടങ്ങിനിൽക്കുന്ന അപൂർണ്ണക്രിയയാണ്. _____
   (സകർമ്മകക്രിയ, വിനയെച്ചം, പേരെച്ചം, കൃതികൃത്ത്)

2. ഭാവികാലത്തെ സൂചിപ്പിക്കുന്ന വിനയെച്ചമേത്?
   (മുൻവിനയെച്ചം, തൻവിനയെച്ചം, പിൻവിനയെച്ചം, നടുവിനയെച്ചം)

3. ക്രിയയുടെ ശുദ്ധരൂപമായ വിനയെച്ചമാണ് _____
   (മുൻവിനയെച്ചം, പിൻവിനയെച്ചം, നടുവിനയെച്ചം, തൻവിനയെച്ചം)

4. ഒരു നാമത്തിനു പകരമായി ഉപയോഗിക്കുന്ന നാമമാണ് _____
   (സംജ്ഞാനാമം, സാമാന്യനാമം, സർവനാമം, മേയനാമം).

5. പറ്റുവിനയെ വിനയെച്ചമെന്നും, _____ എന്നും തിരിക്കാം
   (മുൻവിനയെച്ചം, പേരെച്ചം, പിൻവിനയെച്ചം, മുറ്റുവിന)

6. വാച്യമായ അർത്ഥമുള്ള ശബ്ദത്തെ _____ എന്നു പറയുന്നു.
   (ദ്യോതകം, വാചകം, ദേദകം, ഇതൊന്നുമല്ല)

7. ദ്യോതകത്തിന്റെ പിരിവുകളാണ് നിപാതവും _____ ഉം.
   (വാചകം, ദേദകം, നിപാതം, അവ്യയം.

8. ജാതിവ്യക്തിഭേദമില്ലാതെ പദാർത്ഥങ്ങളുടെ പേരുകൾ കുറിക്കുന്ന ശബ്ദം?
   (സംജ്ഞാനാമം, സാമാന്യനാമം, മേയനാമം, സമൂഹനാമം)

9. 'ക്ക് ' എന്ന ഇടനിലയുള്ള ക്രിയ?
   (സകർമകം, അകർമകം, കാരിതം, അശാരിതം)

10. പൂർണ്ണമായ ക്രിയ?
    (മുറ്റുവിന, പറ്റുവിന, വിനയെച്ചം, ദ്യോതകം)

11. ഓട് എന്ന പ്രത്യേയം വരുന്ന വിഭക്തി?
    (നിർദ്ദേശിക, പ്രതിഗ്രാഹിക, സംയോജിക, ഉദ്ദേശിക)

12. പ്രത്യേയമില്ലാത്ത വിഭക്തി?
    (നിർദ്ദേശിക, പ്രതിഗ്രാഹിക, സംയോജിക, സംബന്ധിക)

13. വർണ്ണങ്ങൾ തമ്മിൽ ചേരുമ്പോൾ ഉണ്ടാകുന്ന മാറ്റത്തിന് പറയുന്ന പേരെന്ത്?

(സന്ധി, സമാസം, വിഭക്തി, വിഭക്ത്യാഭാസം)

14. സന്ധിക്കുന്ന വർണ്ണങ്ങൾ ഒന്ന് ഇരട്ടിക്കുന്നത് _____
    (ലോപസന്ധി, ആഗമസന്ധി, ആദേശസന്ധി, ദ്വിത്വസന്ധി)

15. ഘടകപദങ്ങൾക്ക് തുല്യപ്രാധാന്യമുള്ള സമാസം?
    (തൽപുരുഷൻ, ഉപമിതസമാസം, ദ്വന്ദ്വസമാസം, ബഹുവ്രീഹി)

16. മധ്യഗുരു വരുന്ന ഗണം?
    (തഗണം, ജഗണം,   ഗണം, സഗണം).

17. സമവൃത്തമേത്?
    (ഉപജാതി, പുഷ്പിതാഗ്ര, വസന്തമാലിക, ഇന്ദ്രവജ്ര)

18. ജ ത ജ ഗ ഗ എന്ന ക്രമത്തിൽ വരുന്ന വൃത്തം?
    (ഇന്ദ്രവജ്ര, ഉപേന്ദ്രവജ്ര, ഉപജാതി, നതോന്നത)

19. ഇന്ദ്രവജ്രയും ഉപേന്ദ്രവജ്രയും കലർന്നുവരുന്ന വൃത്തം?
    (ഇന്ദ്രവംശ, വസന്തതിലകം, ഉപജാതി, വംശസ്ഥം)

20. ഏകധർമ്മത്തിൽ അന്വയിക്കുന്ന അലങ്കാരമേത്?.
    (ഉപമ, ഉൽപ്രേക്ഷ, ദീപകം, രൂപകം)

21. ഒരു ധാതുവിനെ സഹായിക്കുന്നതിനായി അതിനുതൊട്ടടുത്ത് പ്രയോഗിക്കുന്ന ധാതുവാണ് _____
    (ദേദകം, വാക്യപ്രയോഗം, പ്രാക്പ്രയോഗം, അനുപ്രയോഗം)

22. അനുപ്രയോഗധാതു ഏത്?
    (കൊൾ, ഉന്നു, ആയി, പോയി)

23. ഹാ എത്ര ചന്തമാർന്ന ചിത്രം _____ ഇതിലെ ദ്യോതകമേത്?
    (എത്ര, ചന്തം, ഹാ, ആർന്ന)

24. പേരെച്ചമേത്?
    (നടന്നുകണ്ടു, കണ്ടുനടന്നു, നടക്കുന്ന കുതിര, ഓടിനടന്നു)

25. ഈട്ടിപ്രയോജികയിൽ വരുന്ന വാക്യമേത്?
    (ഈട്ടിയാലുള്ള പെട്ടി, ഈട്ടിയുടെ പെട്ടി, ഈട്ടിയിൽ ഒരു പെട്ടി, ഈട്ടികൊണ്ടുള്ള പെട്ടി)

26. രണ്ടുപേരും വന്നു. ഇതിൽ ഉം എന്നത് _____
    (ദ്യോതകം, വാചകം, ക്രിയ, നാമം)

27. പ്രയോജക ക്രിയ ഏത്?
    (വലക്കുക, പഠിക്കുക, വഹിക്കുക, വായിക്കുക)

28. ക്രിയാവിശേഷണം ഏത്?
    (ചെറിയ, ഒരു, സമർത്ഥനായ, ഉറക്കെ)

29. കാരികം ഏത്?.
    (പറയുക, പാടുക, പോവുക, വിളിക്കുക)

30. ഊട്ടുക എന്നത് ഏതുവിഭാഗത്തിൽപ്പെടുന്നു?
    (കേവലം, പ്രയോജകം, പേരെച്ചം, വിനയെച്ചം)

31. സൗന്ദര്യം - ഈ പദം ഏതു വിഭാഗത്തിൽപ്പെടുന്നു?
    (ദ്രവ്യനാമം, ക്രിയാനാമം, ഗുണനാമം, സർവനാമം)

32. ആകാശം - ഏതു വിഭാഗത്തിൽപ്പെടുന്നു?
    (സംജ്ഞാനാമം, സർവനാമം, മേയനാമം, സാമാന്യനാമം)

33. ഉപ്പുതൊട്ടു കർപ്പൂരം വരെ - അടിവരയിട്ട പദങ്ങൾ ഏതുവിഭാഗത്തിൽപ്പെടുന്നു?
    (ഗതി, ഘടകം, വ്യാക്ഷേപകം, സാമാന്യം)

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34. ഗതിയേത്?
   (മുതൽ, എന്ന്, ഉം, ഓ, ഓഹോ)

35. കേവലക്രിയക്ക് ഉദാഹരണം?
   (പഠിക്കുന്നു, ഉറക്കുന്നു, പഠിപ്പിക്കുന്നു, നടത്തിക്കുന്നു)

36. അയാൾ പെട്ടന്ന് കണ്ണുതുറന്ന് എഴുന്നേറ്റ് സഞ്ചി എടുത്ത്. - അടിവരയിട്ടതിൽ ക്രിയാപദം അല്ലാത്തത് ഏത്?
   (പെട്ടന്ന്, തുറന്ന്, എഴുന്നേറ്റ് എടുത്ത്).

37. നല്ല എന്ന പദം ഏത് വിഭാഗത്തിൽപ്പെടുന്നു?
   (നാമ, ക്രിയ, ദേദകം, നിപാതം).

38. വരാൻ കഴിഞ്ഞില്ല - അടിവരയിട്ട പദം ഏത് വിഭാഗത്തിൽപ്പെടുന്നു?
   (മുൻവിനയച്ചം, തൻവിനയച്ചം, പിൻവിനയെച്ചം, പാക്ഷികവിനയെച്ചം)

39. മനുഷ്യൻ എന്ന പദം ഏത് വിഭാഗത്തിൽപെടുന്നു?
   (സംജ്ഞാനാമം, ഗുണനാമം, സാമാന്യനാമം, സർവനാമം)

40. പറഞ്ഞെങ്കിൽ - ഏത് സന്ധി?
   (ലോപസന്ധി, ആദേശസന്ധി, ആഗമസന്ധി, ദ്വിത്വസന്ധി)

41. സംബന്ധികാവിഭക്തിക്ക് ഉദാഹരണം ഏത്?
   (രാധയുടെ, രാധയെ, രാധയോട്, രാധക്ക്)

42. നിനക്കുവേണ്ടിയാണ് ഞാൻ കഷ്ടപ്പെടുന്നത്. - അടിവരയിട്ട പദം ഏതുവിഭാഗത്തിൽപ്പെടുന്നു?
   (വ്യാക്ഷേപകം, ഗതി, വിഭക്തിപ്രത്യയം, ഘടകം)

43. എമ്മാതിരി - എങ്ങനെ പിരിക്കാം?
   (എ + മാതിരി, എമ്മ + ആതിരി, എമ + ആതിരി, ഇവയൊന്നുമല്ല.

44. കൈകാലുകൾ വിഗ്രഹിക്കുന്നതെങ്ങനെ?
   (കൈകളും കാലുകളും, കൈയും കാലും, കൈകളും കാലും, കാലും കൈകളും).

45. കണ്ണൂർ എന്ന സ്ഥലത്താണ് ഞാൻ ജനിച്ചത്. എന്ന സ്ഥലത്ത് എന്നതിനു പകരം ഏത് വിഭക്തി ചേർക്കാം?
   (നിർദ്ദേശിക, ആധാരിക, പ്രതിഗ്രാഹിക, ഉദ്ദേശിക)

46. യുദ്ധം ചെയ്യരുത് – ഏത് അനുപ്രയോഗവിഭാഗമാണ്?
   (കാലാനുപ്രയോഗം, ദേദകാനുപ്രയോഗം, പൂർണ്ണാമുപ്രയോഗം, നിഷേധാനുപ്രയോഗം)

47. ഇന്ദ്രവജ്രവൃത്തം ഉപേന്ദ്രവജ്രയിലേയ്ക്ക് മാറുമ്പോൾ വരുന്ന മാറ്റം?
   (ആദ്യഗണത്തിലെ ആദ്യഗുരു ലഘുവായിത്തീരുന്നു, ആദ്യഗണത്തിലെ ആദ്യലഘു ഗുരുവായുത്തീരുന്നു,
   ആദ്യഗണത്തിലെ മധ്യലഘു ഗുരുവാകുന്നു, ആദ്യഗണത്തിലെ അന്ത്യലഘു ഗുരുവാകുന്നു)

48. അത്രാന്തരെ ഗാർഗമഹാമുനീന്ദ്രൻ   - വൃത്തമേത്?
   (ഇന്ദ്രവജ്ര, ഉപേന്ദവജ്ര, ഉപജാതി, രഥോദ്ധത)

49. വിരോധാഭാസം ഏത് വിഭാഗത്തിൽപ്പെടുന്നു?
   (സാമ്യോക്തി, അതിശയോക്തി, വാസ്തവോക്തി, ശ്ലേഷോക്തി)

50. രാമായുധം ഭീമസൂതന്റെ വാമ
   ഗണ്ഡസ്ഥലത്തിൽ സഹസാ പതിച്ചു
   അക്കുംഭിവക്ത്രന്റെ ഇടത്തുകൊമ്പോ
   നിർഘാതഘോരാരവമായ് നിലത്തും– ഇവിടെ ദീപകാല
   ങ്കാരം വരുത്തുന്നത് (രാമായുധം, പതിച്ചു, കൊമ്പോ, നിലത്തും)

51. സ്കന്ദൻ തദാ പുഞ്ചിരിയിട്ടു നന്ദി

കൺചിമ്മി വീശീഗദവീരഭദ്രൻ
വീർപ്പൊന്നു വിട്ടു രുരു കൈതിരുമ്മി
കുങ്ങോദരൻ നാവുകടിച്ചു ചണ്ടൻ
ഇവിടെ

(വിരോധം ചേർത്തു പറഞ്ഞിരിക്കുന്നു, സൂക്ഷ്മസ്വഭാവം വർണ്ണിച്ചിരിക്കുന്നു, അന്യംകൊണ്ട് സമർത്ഥി
ച്ചിരിക്കുന്നു ഏകധർമ്മത്തിൽ അന്വയിച്ചിരിക്കുന്നു.)

52. അർത്ഥാലങ്കാരങ്ങൾക്ക് അടിസ്ഥാനമായ ഘടകങ്ങൾ അതിശയം, സാമ്യം, വാസ്തവം _____
(ഉപമ, ചമല്ക്കാരം, ശ്ലേഷം, ശബ്ദം)

53. കപോലഭിത്തിക്ഷതശോണിതത്താൽ
കാശ്മീരകം ചാർത്തിയ കുഞ്ചരാസ്യൻ
അന്തിച്ചുകപ്പേശിയ ശാരദാദ്രം
പോലെ വിളങ്ങി സ്ഫടികാവദാതൻ - വൃത്തമേത്?
(ഉപജാതി, ഉപേന്ദ്രവജ്ര, ഇന്ദ്രവജ്ര, വൃത്തമില്ല)

54. തൃക്കാൽക്കൽ വീണീടിന ശിഷ്യനേയും
കൃത്താംഗനായിത്തീർന്ന തനുജനേയും
കാരുണ്യ വാൽസല്യ കഷായമായ
കണ്ണാൽ നിരീക്ഷിച്ചു കലേശചൂഡൻ - വൃത്തമേത്?
(ഉപജാതി, ഉപേന്ദ്രവജ്ര, ഇന്ദ്രവജ്ര, മഞ്ജരി)

55. കൈലാസശൃംഗങ്ങളിലൊന്നിനൊപ്പം - വൃത്തം നിർണ്ണയിക്കുക?
(ഇന്ദ്രവജ്ര, ഉപേന്ദ്രവജ്ര, ഉപജാതി, ഇവയൊന്നുമല്ല)

56. ഇരുന്നു എന്നതിന് ഇരിക്കുക എന്ന ക്രിയയുടെ അർത്ഥം വരുന്നത് എവിടെ?
(സന്യാസി തന്റെ ഇരിപ്പിടത്തിൽ വന്നിരുന്നു,
അദ്ദേഹത്തിന്റെ കൂടെ വന്നവർ നിന്നതേയുള്ളൂ,
രണ്ടുപേർ അദ്ദേഹത്തെ കാത്തുനിന്നിരുന്നു
ഇന്നലെ അദ്ദേഹം ആക്രമത്തിൽ ചെന്നിരുന്നു)

57. കൃഷ്ണ എന്ന പദം ദ്വ്യോതകമായി പ്രയോഗിച്ചിട്ടുള്ളത് ഏതിൽ?
(പാഞ്ചാലി കൃഷ്ണാ എന്നു വിളിച്ചുകരഞ്ഞു,
കൃഷ്ണാ നീയെന്തുപണിയാ പറ്റിച്ചത്
കൃഷ്ണാ ഇത്തവണയും പരീക്ഷയിൽ രക്ഷപ്പെട്ടില്ലല്ലോ
കൃഷ്ണാ ശ്രദ്ധിച്ചുപഠിച്ചാൽ ഇത്തവണ പരീക്ഷയിൽ ജയിക്കാം).

58. ചുവന്ന ചന്ദ്രക്കലപോൽ വളഞ്ഞും
വിളങ്ങി പൂമൊട്ടുടനെ പിലാശിൽ- വൃത്തമേത്?
(ഇന്ദ്രവജ്ര, ഉപേന്ദ്രവജ്ര, ഉപജാതി, കാകളി)

59. അപേക്ഷിച്ചുകൊള്ളുന്നു - പതിവുസൂചിപ്പിക്കുന്ന അനുപ്രയോഗമാക്കി മാറ്റുക.
(അപേക്ഷിച്ചുപോയി, അപേക്ഷിച്ചു, അപേക്ഷിച്ചുപോരുന്നു, അപേക്ഷിച്ചില്ല)

60. (ചേർക്കുന്നു, വളർത്തുന്നു, അകറ്റുന്നു, നടക്കുന്നു) കൂട്ടത്തിൽ ചേരാത്തത് ഏത്?

61. (ഉറങ്ങി, ഉയർത്തി, വിളിച്ചു, പറഞ്ഞു) കൂട്ടത്തിൽ ചേരാത്തത് ഏത്?

62. (വീഴ്ച, ചാട്ടം, അറിവ്, പുതുമ) കൂട്ടത്തിൽ ചേരാത്തത് ഏത്?

63. രാമൻ കടയടച്ച് രാമന്റെ കുടയെടുത്ത് വേഗം നടന്നു -
അടിവരയിട്ട പദത്തിന് പകരം സർവനാമം പ്രയോഗിക്കുക.
(തന്റെ, അയാളോട്, വേഗത്തിൽ, രാമനാൽ)

64. അച്ചനുമമ്മയും കോഴിക്കോട്ടേക്കുപോയി-

അടിവരയിട്ട പദത്തിന് പകരമായി ദ്വന്ദസമാസം വരുന്ന മറ്റൊരു പദം പ്രയോഗിക്കുക.
(അച്ഛനും അമ്മയും, അമ്മയുമച്ഛനും, അച്ഛനമ്മമാർ)

65. ദ്വിത്വസന്ധിക്ക് ഉദാഹരണമല്ലാത്തത്
(മരം + ഇൽ, അ + കാലം, ഇ + തടി, എ + മട്ട്)

66. പാലത്തെഴും പുതിനിലാവിലലം കുളിച്ചും
ബാലാതപത്തിൽ വിളയാടിയുമാടലന്യേ
നീ ലീലപൂണ്ടിളയമൊട്ടുകളോടു ചേർന്നു
ബാലത്വമങ്ങനെ കഴിച്ചിതു നളിൽ നാളിൽ
അലങ്കാരമെന്ത്?
(സ്വഭവോക്തി, അർത്ഥാന്തരന്യാസം, ഉൽപ്രേക്ഷ, ഉപമ)

Appendix IX (b)

Achievement Test

ഉത്തരസൂചി

I

1.	വിനയെച്ചം	34.	മുതൽ
2.	പാക്ഷിക വിനയെച്ചം	35.	പഠിക്കുന്ന
3.	നടുവിനയെച്ചം	36.	പെട്ടെന്ന്
4.	സർവ്വനാമം	37.	ദ്വേദകം
5.	പേരെച്ചം	38.	പിൻവിനയെച്ചം
6.	വാചകം	39.	സംജ്ഞാനാമം
7.	അവ്യയം	40.	ലോപസന്ധി
8.	മേയനാമം	41.	ഉടെ
9.	കാരിതം	42.	വിഭക്തി പ്രത്യയം
10.	മുറ്റുവിന	43.	എ + മാതിരി
11.	സംയോജിക	44.	കൈയും കാലും
12.	നിർദ്ദേശിക	45.	ആധാരിക
13.	സന്ധി	46.	നിഷേധാന പ്രയോഗം
14.	ദ്വിതിസന്ധി	47.	ആദ്യഗണത്തിലെ ഗുരു ലഘുവാകുന്നു.
15.	ദ്വന്ദ്വസമാസം	48.	ഇന്ദ്രവജ്ര
16.	ജഗണം	49.	അതിശയോക്തി
17.	ഇന്ദ്രവജ്ര	50.	പതിച്ചു
18.	ഉപേന്ദ്രവജ്ര	51.	സൂഷ്മസ്വഭാവം വർണ്ണിച്ചിരിക്കുന്നു
19.	ഉപജാതി	52.	ശ്ലേഷം
20.	രൂപകം	53.	ഉപജാതി
21.	അനുപ്രയോഗം	54.	ഇന്ദ്രവജ്ര
22.	കൊൾ	55.	ഉപേന്ദ്രവജ്ര
23.	ഹാ	56.	സന്യാസി തന്റെ ഇരിപ്പിടത്തിൽ വന്നിരുന്നു
24.	നടക്കുന്ന	57.	പാഞ്ചാലി കൃഷ്ണാ എന്നു വിളിച്ചു കരഞ്ഞു
25.	ഈൗട്ടിയാലുള്ള പെട്ടി	58.	ഇന്ദ്രവജ്ര
26.	ദ്യോതകം	59.	അപേക്ഷിച്ചുപോരുന്നു
27.	വലയ്ക്കുക	60.	അകറ്റുന്നു
28.	ഉറക്കെ	61.	ഉറങ്ങി
29.	വിളിയ്ക്കുക	62.	പുതുമ
30.	പ്രയോജകം	63.	തന്റെ
31.	ഗുണനാമം	64.	അച്ഛനമ്മമാർ
32.	മേയനാമം	65.	മരം + ഇൽ
33.	ഗതി	66.	സ്വഭാവോക്തി

APPENDIX X (a)

POST-TEST SCORES OBTAINED BY MASTERY LEARNING GROUP
(Score out of 100)

Sl. No.	Total score	Knowledge level	Understanding level	Application level	Sl. No.	Total score	Knowledge level	Understanding level	Application level
1	30	10	9	11	22	31	12	10	9
2	57	20	22	15	23	35	15	10	10
3	48	15	23	10	24	45	20	12	13
4	56	20	20	16	25	58	23	20	15
5	55	20	20	15	26	32	12	10	10
6	60	18	30	12	27	55	31	10	14
7	40	18	10	12	28	41	18	13	10
8	55	22	20	13	29	30	15	8	7
9	63	27	20	16	30	62	27	20	15
10	72	25	32	15	31	72	25	32	15
11	62	29	20	13	32	65	22	28	15
12	73	25	34	14	33	60	18	30	12
13	74	26	32	16	34	64	22	28	14
14	62	28	20	14	35	63	24	26	13
15	741	20	35	16	36	72	29	28	15
16	65	22	28	15	37	66	28	22	16
17	100	33	50	17	38	70	30	24	16
18	96	33	48	15	39	98	31	50	17
19	88	30	45	13	40	96	33	48	15
20	89	30	43	16	41	90	25	50	15
21	55	31	10	14	42	87	28	45	14

APPENDIX X (b)

POST-TEST SCORES OBTAINED BY ADVANCE ORGANISER GROUP
(Score out of 100)

Sl. No.	Total score	Knowledge level	Understanding level	Application level	Sl. No.	Total score	Knowledge level	Understanding level	Application level
1	53	22	20	15	22	56	20	23	13
2	41	18	10	13	23	32	10	10	12
3	42	20	12	10	24	55	23	18	14
4	46	18	20	8	25	54	24	17	13
5	52	20	20	12	26	46	23	10	13
6	58	23	20	15	27	45	22	10	13
7	55	20	22	13	28	31	10	10	11
8	55	21	20	14	29	31	11	10	10
9	65	24	25	15	30	40	231	9	10
10	64	23	26	15	31	63	20	28	15
11	67	30	22	15	32	64	21	28	15
12	67	28	25	14	33	70	20	34	16
13	62	24	25	13	34	58	21	22	15
14	68	24	29	15	35	40	20	10	10
15	68	29	24	15	36	70	25	35	10
16	61	21	24	16	37	58	21	21	16
17	58	21	20	14	38	58	22	20	16
18	78	28	374	13	39	95	33	46	16
19	78	32	32	14	40	79	30	35	14
20	90	30	45	15	41	75	30	30	15
21	90	32	40	18	42	75	30	30	15

APPENDIX X (c)

POST-TEST SCORES OBTAINED BY TRADITIONAL METHOD GROUP
(Scores out of 100)

Sl. No.	Total score	Knowledge level	Understanding level	Application level	Sl. No	Total score	Knowledge level	Understanding level	Application level
1	18	10	4	4	22	40	22	10	8
2	18	12	4	2	23	19	11	4	4
3	28	15	6	7	24	20	11	5	4
4	18	12	2	4	25	17	12	3	2
5	18	11	6	1	26	17	11	5	1
6	20	13	4	3	27	30	20	5	5
7	15	10	3	2	28	30	18	7	5
8	18	9	7	2	29	20	10	6	4
9	16	10	3	3	30	28	20	5	3
10	39	20	10	9	31	25	18	4	3
11	27	20	4	3	32	38	21	10	7
12	35	20	10	5	33	40	25	7	8
13	28	18	5	5	34	39	23	10	6
14	35	22	8	5	35	24	15	5	4
15	25	17	5	3	36	27	17	5	5
16	33	20	9	4	37	38	21	10	7
17	26	19	5	1	38	38	22	10	6
18	25	20	2	3	39	48	25	13	10
19	60	30	20	10	40	49	26	13	10
20	50	30	10	10	41	47	28	10	9
21	49	28	11	10	42	50	30	12	8

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APPENDIX XI

MEMBERS OF EXPERTS CONSULTED FOR THE STUDY
(OTHER THAN THE SUPERVISING TEACHER)

1. Dr. P. Sreemanunni,
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5. Sri. K. Raghunath,
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   G.H.S. Kakkodi, Kozhikode

6. Sri. Kadangot Prabhakaran
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7. Sri. Girish Babu,
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