# CHAPTER ONE INTRODUCTION

#### 1.1. General Background

The term "test" is defined as a device that measures a person's ability or knowledge in a given area. It is used as a process of scrutinizing how far learners have learned what the teacher wishes them to learn. In this process, the teacher usually makes queries in the classroom during or after his teaching or administers an examination at the end of a lesson or a unit or chapter or a course of study.

Most of the scholars take the terms "test" and "examination" interchangeably. They are similar in a sense that both of them require testees to perform; both contain a list of tasks or test items requiring students to act up on them. However, they are different from the viewpoint of the way their items are selected, and the purposes behind them. In other words, they differ in terms of exam- syllabus and the interpretation of the results. In most cases, the examination is concerned with achievement.

Language teaching and language testing are inherent parts and we cannot separate them. In other words, we can sum up that testing is an integral part of teaching. Testing has been used since the teaching began. Testing has been serving as both an instrument for educational reform as well as the most important tool for research. Gaining insights from research, testing has become an instrument to contribute to change in the way teachers perform in the classroom, and the way reform takes place in the whole system of education. The role of testing in research has been so effective that it has been constantly contributing to improve the process of education as a whole. That is why the concept of what is to be taught and tested has been changing over time. To be more specific about the term "test", let's see how different scholars have defined it. Brereton (cited in Khaniya, 2005) defines a test as "a tool designed to provide an accurate standardized measurement of certain abilities or skills without creating any tension in the students." Supporting this view Hughes (1995, p.9) opines, "We use tests to obtain information. The information that we hope to obtain will of course vary from situation to situation." Another expert, Heaton (1975, p.5) in his book "Writing English Test" says, "Test may be constructed primarily as devices to reinforce learning and to motivate the student or primarily as a means of assessing the students' performance in the language. A rather detail definition of test is asserted by Harrison (1983, p.1). "A test is seen as a natural extension of classroom work, providing teacher and students with useful information that can serve each as a basis for improvement." Richards et al. (1985) depict about the test a bit differently than Harrison he defines test in his own words as,

an activity the main purpose of which is to convey (usually to the tester) how well the testees knows or can do something. This is in contrast to practice, the main purpose of which is sheer learning. Any procedure for measuring ability, knowledge, and performance is called test.

Similarly, Rivers (1968) defines the term test a bit differently than Richards et al. He defines the term "test" as "...teaching devices and therefore as a natural steps in the educational process. They serve two-fold purpose, acting as a guide to the students and a guide to the teacher."

Now, we can sum up that test is defined as an assessment of student's achievement in a course, which is associated with testing and teaching. Testing offers useful inputs to the teacher to be aware of the effect of his teaching, and some insights on whether he should continue the way he teaches or change it in order to make his teaching more effective. With the help of testing, we can diagnose students' strengths and weaknesses to discover how far students have achieved the objectives of a course of study. Tests measure and evaluate a course or group of students. It usually grades students or puts them on a scale. Similarly, it also helps to motivate the students to learn or review specific material.

In testing, we have to consider the different approaches to language testing. It was observed that there have been changes in what to test because of the changes in understanding of what it means to know a language and to teach a language. It has been argued in this section that what is to be tested has passed through different stages over the decades. Let us see the different approaches to language testing given by Heaton (1988).

#### **1.1.1. The Essay-Translation Approach**

The essay-translation approach is commonly referred to the pre-scientific stage of language testing. According to this approach, no special skills or expertise in testing is required to be a good tester. Therefore, a good teacher is said to be a good tester. The subjective judgment of the teacher is considered to be of paramount importance. Such types of tests usually consist of essay writing, translation and grammatical analysis.

#### **1.1.2. The Structural Approach**

This approach is often known as discrete approach, which came as a reaction against the traditional approach, which was severely criticized for not being reliable and valid. Therefore, this approach to language testing emerged along with the emergence of structural linguistics. It believes that each aspects as well as skills of language should be tested separately; it is possible as well. It maintains that we can break language proficiency into smaller sequences. Spolsky (1978, cited in Khaniya 2005, pp.13-14) states, "This approach was based on the assumption that language testing could be made precise, objective, reliable, and scientific". Regarding to this approach, Heaton (1988, p.15) says, "This approach is characterized by the view that language learning is chiefly concerned with the systematic acquisition of a set of habits." In the history of language testing, this phase has a special recognition. Clark (1987) calls it a "golden age" of second language testing especially with reference to the development of standardized tests.

This approach was the product of the structuralism's tradition in linguistics, behaviorist traditions in psychology and language teaching, which had regarded the principles like- language as a set of habits, language was taken to consist different levels- phonology, morphology, lexis, and syntax. This approach is based on the assumption that testing of language elements is equal to testing of language itself. The contribution of this approach to language testing were accuracy of achievement, reproduction of isolated language elements, independence of the context, accuracy rather than fluency. It focuses on the fact that tests should test language use not knowledge about language. The format of the test is composed of short answers and multiple-choice items.

This approach was criticized on the ground that language is not merely an arrangement of elements which can be tested in terms of yes-no answers. Furthermore, testing of language proficiency cannot be sufficient by requiring the examinee to exhibit only the ability to use the language elements in isolation. Rather, it is argued that language should be seen in terms of the total context in which it is being used in an authentic-like setting.

# **1.1.3.** The Communicative Approach

This approach is sometimes synonymously known as integrative approach. It aims to test the communicative competence of the learners. According to this approach, a good test should test those skills and abilities needed for the learners to perform language in the real context of language use. Heaton (1988, p. 19) says, "Communicative tests are concerned primarily with how language is used in communication." Here, success is judged in terms of the effectiveness of the communication that takes place rather than formal linguistic accuracy. Language "use" is often emphasized to the exclusion of language "usage". "Use" is concerned with how people actually use language for a multitude of different purposes while "usage" is concerned the formal patterns of language.

In this approach, students prepare themselves for the genuine piece of communication. Meaning is focused rather than structure: even grammatically wrong sentences well communicate the message. This approach to language testing assumes that second or foreign language learning is also analogous to the first language acquisition. Weir (1990, p. 11) states,

the important role of context as a determinant of communicative language ability is stressed and an integrative approach to assessment as against a decontextualized approach is advocated. Language cannot be meaningful if it is devoid of context (linguistic, discoursal and socio-cultural).

Savignon (1983, cited in Khaniya 2005, p.27) supports Weir regarding the importance of context specific teaching of grammar and further elaborates that communication provides the infinite variety of situation for the learner. Thus, success of a learner depends on his/her understanding of context and his pre-knowledge of the similar kind. It clearly illustrates the importance of contextual teaching.

For Venkateswaran (1995, p.66) "Communicative approach to language teaching aims at developing communicative competence of the learners which would include the learners acquiring the knowledge of communicative functions of the language and the linguistic means to perform the different kinds of functions."

Richards (1986, cited in Venkateswaran, 1995, p. 68) focuses on the acquiring the functions and notions expressed by the language. He further says that the structure of language has not merely its grammatical and structural features, but categories of functional and communicative meanings.

Thus, communicative approach to language testing tests the real use of language rather than usage. It focuses on all the components of the communicative competence of the learner and is not restricted to grammatical or linguistic competence. In this approach, "forms" are not primary, but "functions" are primary. It holds the view that "function" is the framework through which "forms" are acquired. It emphasizes on the students' "use" of the language in the classroom more than their possessing mere knowledge of the language.

#### **1.1.4.** Techniques of Teaching Grammar

Many people, including language teachers, hear the word "grammar" and think of a fixed set of word forms and rules of usage. They associate good grammar with the prestigious forms of the language, such as those used in writing and in formal oral presentations, and 'bad' or no grammar with the language used in everyday conversation or used by speakers of non-prestigious forms. Language teachers who adopt this definition focus on grammar as a set of forms and rules. They teach grammar by explaining the forms and rules and then drilling students on them. The result was that students who can produce correct forms on exercises and tests, but consistently make errors when they try to use the language in contexts. Supporting the view of teaching grammar in context Ur (1996, pp. 77-78) says "Grammar helps for language teaching and learning if it is taught consistently as a means to improving mastery of the language, not as an end in itself."

Grammar teaching is not an easy task. It has been a matter of debate for a long time especially for foreign or second language teaching. On the one side of the continuum, there are people who claim that grammar teaching is not necessary because its teaching does not help in the acquisition of the language. Krashen and Terrell (1983, p.144) support this view when they say, "We prefer to avoid oral grammar instruction in classroom simply because they take time away from acquisition activities."

On the other side of the continuum, others claim that grammar teaching is necessary. Cowan (2009, p. 3) highlights the importance of teaching grammar when he says,

"... grammar is one aspect of adult language on which instruction can have a lasting effect." Ur (1996, p.5) expresses doubt on the effectiveness of communicative activity to develop accuracy in learners when she mentions, "Ability to communicate effectively is probably not attained most quickly or efficiently through pure communication practice in the classroom not, at least within the framework of formal course study."

Thornbury (1999, p.16) agrees with Ur (ibid) when he says, "Research suggests that learners who receive no (grammar) instruction are at the risk of fossilizing sooner than those who receive."

Grammar was given central role in structural linguistics. Wilkins (cited in Neupane 2009) mentions, "It is the aim of the linguists to reveal the system of the language, the langue, and of the language teacher to enable people to learn it." At

that time, knowing grammar was equated to knowing language. The role of grammar declined with the introduction of communicative language teaching movement, which tended to downplay the value of grammar teaching by giving more priority to fluency rather than accuracy. But by the second half of the 1980s, grammar has been rediscovered. In spite of arguments for both for and against teaching grammar, it has been realized grammar teaching does help for the acquisition of language in question. Accuracy without fluency is meaningless. At the same time, fluency without accuracy is also not desirable. Thus, learners are supposed to have both accuracy as well as fluency. Thus, the knowledge of grammar is inevitable for systematic analysis of language forms and to develop accuracy in the same way it is necessary to monitor our performance. Though the language without grammar becomes handicapped, teaching of grammar has always been controversy in foreign language teaching situation. People also make arguments on the way they can best teach the grammar of a particular language. Mainly, we have two approaches of teaching grammar i.e. deductive and inductive.

In deductive approach, first we present the rules then after we give some examples based on these rules. Richard et al. (1985) define deductive approach as,

...an approach to language teaching in which learners are taught rules and given specific information about a language. They then apply these rules when they use the language. Language teaching methods, which emphasize the study of the grammatical rules of a language (grammar translation method), make use of the principles of deductive reasoning.

Supporting the view of Richard et al. Doughty (2003,p.265 cited in Cowan 2009 p.31) says, "In explicit grammar teaching, the rules are explained to learners, or the learners are directed to find the rules by looking at linguistic examples, that is, sentences that embody the rules". Regarding the deductive approach Cowan

(2009, pp.31-32) says "Different structures are presented and then practiced in different kinds of exercises and activities including memorizing dialogs, reading simplified texts ,doing transformation exercises, and getting explicit negative feedback."

On the other hand, inductive approach starts with some examples from which a rule is derived. Richard et al. (1985) define inductive approach as "an approach in which learners are not taught grammatical or other types of rules directly but are left to discover or induce rules from their experience of using the language". Carter, Hughes and McCarthy (2009, p. viii) say, "An inductive approach to learning grammar often involves providing lots of examples so that the patterns of usage can be seen."

Doughty (2003, p.265 cited in Cowan 2009, p.31) says, "Implicit teaching makes no overt reference to rules or forms". Similarly Cowan (2009, p.32) mentions that "the inductive instruction involves having students formulate rules form natural language, and it is perhaps more useful in teaching intermediate and advanced students."

There are various techniques and activities that are used in teaching English grammar and the teachers of EFL/ESL should know them. Harmer (1991) discusses three different techniques of teaching grammar inductively, viz. presenting grammatical items, discovery technique and practice technique.

#### a. Presenting Grammatical Items

Presentation is the stage at which students are introduced to the form, meaning and use of a new piece of language. They learn, for example, how "did" work with the past tense if they are being presented with past tense questions for the first time. Alternatively, they learn about the different endings of regular past tense verbs such as watched /t/, earned /d/, and landed /id/. At the same time, as learning how new language is constructed, they learn what it means and how it is used. At the presentation stage, students learn the grammar that they will need for their most important experience of the new language applying it to them. Such experience is "personalization". This is the stage at which students use a new piece of grammar to say things, which really mean something to them. For example, if students have been presented with the simple present, the personalization stage is where they apply it to themselves by saying what they do, where they live, where they go for entertainment and so on. It is often the first time students get a chance to use the new language for themselves. Presentation of the grammatical items can be done using charts, dialogues and texts for contrast, text for grammar explanation, visual for situations.

#### **b.** Discovery Techniques

Discovery techniques encourage students to 'discover' facts about grammar and grammatical items. In this technique, students are given examples of language and told to find out how they work- to discover the grammar rules rather than be told them. This simply means that students are exposed to the new language, with no focus or fuss, sometimes before it presented. At a more conscious level, students can be asked to look at some sentences and say how the meaning is expressed and what the differences are between the sentences. As the students puzzle through the information and solve the problem in front of them, they find out how grammar is used in a text and are actually acquiring a grammar rule. Grammatical items can be taught doing these types activities such as preview, matching technique, text study and problem solving.

#### c. Practice Techniques

In practice techniques, students practice grammatical items in each case, the teacher or the textbook writer has decided that certain specific items of language

should be practiced. There are various ways of doing this. Some of them are straight forward- like drills and others are more involved such as the use of interaction activities, games and quizzes.

#### 1.1.5. Ways of Testing Grammar

Grammar is no doubt a backbone of a language for the trade, writing, reading, and speaking. Grammar is of great importance in the English language as in other languages. The central part of a language is its grammar and this should be of vital interest to any intelligent educated persons. Grammar plays a vital role, mainly in speaking and writing in any language of the world even though some languages do not have grammar. Thus, a person who does not make grammatical mistakes while speaking and writing can be called a good speaker and writer. It gives satisfaction to the reader and listener as well.

Grammar can be tested through objective items. According to Heaton (1988, pp.34-50), the common ways of testing grammar are:

- a) Multiple choice items
- b) Error recognition items
- c) Rearrangement items
- d) Completion items
- e) Transformation items
- f) Items involving the changing of words
- g) Broken sentence items
- h) Pairing and matching items
- i) Combination and addition items

#### a. Multiple - Choice Items

It is one of the ways of testing grammar, which accesses the learners knowledge of grammar; rather than the ability to use language. Each

multiple-choice item should have only one correct answer. This answer must be correct unless the instruction specifies choosing the best alternative. It should be as brief and as clear as possible. It requires preparation that is far more careful. Therefore, the tester spends a great deal of time while constructing such items.

#### **b. Error- Recognition Items**

Many psychologists and teachers who hold the view that it is undesirable for students to be exposed too much to incorrect forms support this argument. This type of item is closely related to those skills required when students check, edit or proof read any report, article, paper or essay they have just written.

#### c. Rearrangement Items

This type of item can take several forms. It seems to be a danger of constructing the testees by presenting them with the problem in such a way that a certain amount of mental juggling becomes necessary on their part. It can be used to test the same features order, but the item format becomes a little less artificial. Here, the students are simply required to unscramble sentences and to write out each sentence putting the words or constituent parts in their correct order.

#### d. Completion Items

Completion items are a useful means of testing a student's ability to produce acceptable and appropriate forms of language. They are frequently preferable to multiple –choice items since they measure production; rather than recognition. Testing is the ability to insert the most appropriate words in selected blanks in sentences. The words selected for omission are grammatical or functional words. Completion items cannot, of course, be machine –marked but they are very useful for inclusion in classroom tests and for exercise purposes. However, sometimes the most straightforward completion items can create the problems in scoring.

#### e. Transformation Items

The transformation type of item is extremely useful for testing ability to produce structures in grammar. It helps to provide a balance when included in tests containing multiple –choice items. Although transforming sentences is different from producing sentences subjective decisions, of course, may have to be made in the scoring process: Transformation can also be effective by requiring students to substitute a given verb in a sentence.

#### f. Items Involving the Changing of Words

This type of item is useful for testing the student's ability to use correct tenses and verb forms. It is a traditional type of test but the layout is improved in this particular case by providing blanks on the right of the text for completion. The continuity of the text is not impaired more than necessary by having both blanks and underlined words inserted in the sentences. Thus, the risk of obscuring the meaning of the text is reduced.

#### g. Broken Sentence Items

It tests the student's ability to write full sentences from a series of words and phrases. It does not allow the test writer to concentrate exclusively on testing those particular grammatical features, which may have just been practiced in class. It is nevertheless a useful device for testing grammar if the testee is aware that several other areas of the language are being tested in addition to those on which he or she wishes to focus attention. Many students are able to score high marks on grammar items when each item is set in isolation and concentrates on only one area of grammar.

When setting this item, make sure that the instructions are very clear indeed and provide one or two examples. If students become unfamiliar with this particular item format then they will have frequently difficult in knowing exactly what to do.

#### h. Pairing and Matching Items

This type of item usually consists of a short conversation: e.g., a stimulus in the form of a statement or question followed by a response often in the form of a statement. It is used to test the ability to select appropriate responses to stimuli, which would be presented orally in normal everyday situations. The item is more useful for testing students' sensitivity to appropriacy and their awareness of the functions of language rather than their knowledge of grammar. Students are simply required to write the letter of the correct response in the space provided.

#### i. Combination and Addition Items

These objective type items have long been used in past tests. They should be used sparingly, however, as they involve largely mechanical responses on the part of the student. In combination items, students are instructed to join each pair of sentences using the word in brackets. On the other hand, in addition, items students are instructed to insert the word in capitals in the most appropriate place in each sentence.

#### **1.1.6.** The Concept of Correlation

Correlation is the mutual connection between two types of data, scores, or test results. The reliability of two tests shows their mutual relation. If all the environment is same and same test is given to the same students several times, there may have high correlation between the two series of the score. It is such a relation, if one data increases another also goes up and if it decreases, another comes down. The correlation does not always define which variable is cause and which one is effect. To say mathematically, it is the relation between two types of data in which one type of data is directly proportional to another type of data. Correlation is measured with the help of correlation coefficient.

There are different mathematical formulas to measure the correlation. It also can be graphically represented by a scatter diagram or by a simple graph. The highest value of correlation coefficient is '+1' and the lowest is '-1'. Here, '+1' indicates the highest positive correlation and '-1' indicates the highest negative correlation. The value, which is zero, indicates the absence of correlation. These three types of relationship can further be classified as high, moderate and low in terms of its degree of quantification. What is true is that the greater the value, the stronger the relationship between the two variables will be.

There are a number of ways to compute the correlation coefficient of the variables. But the concept underlying them all is the same. The correlation coefficient of the two variables can easily be shown either in the scatter gram/plot or by computing it with statistical formula. According to Hatch and Farhady (1982, p.197), "the correlation coefficient that is symbolized by the letter '*r*' can be defined as the mean cross product of the '*z*' scores".

Defining the term 'correlation', Alderson et al. (1995, p.77) say, "The concept of correlation, by which we mean the extend to which two sets of results agree with each other." Richards et al. (1985, p.66) say, "Correlation is a measure of the strength of the relationship between two sets of data."Regarding to the correlation analysis Hatch and Farhady (1982, p.195) say, "The statistic that describes the

relationship between two variables is called a correlation coefficient. This coefficient indicates how closely the two variables are related."

To conclude, correlation can be defined as an investigation that is carried out to find out the degree of variable relationship. The correlation coefficient is a quantitative measure that represents the degree of relationship between the pairs of variables. A correlation coefficient is a single figure, which expresses how much two series of numerical observation have in common. It is not a research method in itself, but is a tool/technique used to analyze the data for other research designs.

We can display the correlation between two sets by the help of graphic methods and mathematical methods.

They are listed as follows:

#### a) Mathematical Methods

- i. Karl Pearson's Product moment Correlation
- ii. Using Covariance
- iii. Spearman's Rank Order Correlation
- iv. Using z score

# **b)** Graphic Method

- i. Scatter diagram
- ii. Simple graph

#### i. Spearman's Rank Order Correlation

For the numerical value of the correlation, we can use different mathematical formulas. In this interpretation, we use only one mathematical formula to calculate

the correlation coefficient. The researcher used Spearman's Rank Order Correlation in his research to calculate the correlation because it is the formula, which is used for the repeated data. According to Hatch and Farhady (1982, p.205) "When the variables in the correlational analysis are measured on an ordinal (ranking) scale, the appropriate statistic to use is Spearman's rank order correlation (represented by *rho*, ... )."

To calculate the correlation using this formula, first of all we should arrange the scores on the two variables in a rank order from high to low and then, through computation, obtain a coefficient which tells us how the rankings of scores on the two variables are related.

# 1.1.7 The Concept of Grammar in Context and Grammar in Isolation: Testing Prospective

Grammatical items can be tested either in context or in isolation. Here, if the learners have known many rules of grammar sometimes they would have failed to apply those rules in their real-life situations. If grammar is tested in context, the learners are likely to encounter their own real-life situations. Weir (1990, p. 11) stressed, "The important role of context as a determinant of communicative language ability is stressed and an integrative approach to assessment as against a decontextualized approach is advocated. Language cannot be meaningful if it is devoid of context."

Oller (1973, 1979, cited in Weir 1990, p.11) also supports the Weir's view concerning the importance of context and defines the term context as, "The higher the level at which language is contextualized, the more effective language perception, processing, and acquisition are likely to be". Cowan (2009, p. 34) defines rather differently. He says that contextual teaching removes the shortcomings of traditional teaching methods and helps to achieve determined goals. His own words regarding teaching grammar in context are

teaching grammar in context consists of a variety of techniques that can be used to achieve certain goals, rather than a formal method with a series of prescribed steps that should be followed. Grammar in context is a reaction against the "focus on forms" format of traditional language teaching syllabi that present discrete units that focus on a particular grammar point before moving on to another grammar point.

Cowan (2009, p.35) further says,

teaching grammar in context seems to be more suitable for students who have at least an upper-intermediate level of proficiency, since students must possess a sufficient knowledge of grammar to make judgments about "authenticity" and to explain the basis of their judgments.

Nunan (1998, p.101 cited in Cowan 2009, p.34) feels that "This strictly linear approach to language learning, one grammatical item at a time...before moving on to the next is an unrealistic view of how any student learns a second language."

Nunan (1998 cited in Cowan 2009, p. 34) further mentions some of the operational principles of teaching grammar in context they are as follows:

- i. Expose learners to many examples;
- ii. provide them with opportunities to use language that they have not been exposed to or have not practiced in any systematic way;
- iii. give them opportunities for collaborating with other students and comparing their efforts; and
- iv. let them revise and compare their final efforts with the language in the original text.

Grammar in context also encourages an inductive approach to grammatical rules and principles; rather than relying exclusively on the presentation-practiceproduction approach of many traditional grammar books. Grammatical rules can sometimes be best explained by means of a single sentence and a rule that can then be applied to other examples. Sometimes it is helpful to learners for the sentence to be invented or for the authentic language to be modified in order to illustrate the rule. However, the focus of this research is on helping learners to work out grammatical rules for themselves. Here, the learners select the grammatical items as per the context given. This approach fosters learners' autonomy, encouraging learners to be more independent and to develop some of the skills they need beyond the classroom when they work on their own and when the teacher is not present.

Grammar in isolation is another way of testing grammar, which accesses the grammatical items in isolation. The teaching of grammar in isolation helps to develop high-order critical thinking skills that are essential to the development of "good writing" but that critical thinking skills are very difficult to measure and have an indirect impact on a piece of writing rather than a direct effect. It encourages a deductive approach to grammatical rules and principles.

#### 1.1.8. The Present Specification Grid for SLC Examination

The specification grid has two columns: knowledge and understanding and practical abilities, which are also referred to as competence and performance. Competence refers to the ability in practical situation. In other words, grammatical knowledge of a language on the part of a learner is his competence and how he uses that knowledge in actual use of that language is his performance.

In the grid, the performance or practical ability is subdivided into four columns: Listening, Speaking, Reading, and Writing with the weighting of 10, 15, 40, 35 marks respectively. The time to be taken, the number and types of questions to be constructed the materials to be used and the objectives to be measured are mentioned below in each skill.

In the case of reading skill, the grid shows how many seen and unseen texts are to be set. Seen texts carry 15 marks, which is less than unseen texts that carry 25 marks. It discourages rote learning and assesses the reading skills of the students. Similarly, in the case of writing skill, the number and types of questions are clearly mentioned. The grid also specifies that knowledge and understanding or competence in grammar will not be tested separately as in the previous SLC examination; rather they will be integrated into practical activities, particularly in the writing skill.

Finally, it also says that the same question types should not be repeated. For example, true/false question type should not appear in both seen and unseen texts. The specification grid serves four purposes as shown below:

- a) Reflects assessment part of curriculum
- b) Specifies areas and skills to be assessed
- c) Shows the type and number of questions
- d) Helps teacher to construct test items

(Source: CDC (2005) Revised Specification Grid of Secondary Level Compulsory English)

Grammar is regarded as one of the most important components in teaching and learning. The use of grammatical items in an appropriate situation and context makes a language purposeful and understandable. Without knowledge of grammar, one cannot express himself or herself accurately and perfectly. The grammatical items included in the present grid are article, preposition, tags, concord, transformation, tense, reported speech, voice, connectives, conditional, causative verbs, with weighting of each item one mark. The SLC Examination Specification Grid 2065 has allocated eleven marks for the grammatical items. Among them six marks have been allocated for grammar in isolation and five marks for grammar in context.

#### **1.2. Review of the Related Literature**

Some research works related to grammar have been carried out under the Department of English Education, T.U. they are briefly reviewed below.

Shrestha (1995) in his study "A Comparative Study of Proficiency in English Grammar between the Students of the Urban and Rural Schools in Katmandu Valley". He found out that in totality the students of urban school are far better than their rural counterparts by 10.8 percent. The reasons behind this are- lack of qualified teachers (in the rural areas), lack of extra textbooks and poor exposure. Similarly he also found out that the learning environment at the urban schools is better than the rural ones.

Sharma (1997) studied the grammatical proficiency of the students. In his research entitled "A comparative study on the Use of Voice by Ten Graders Between Public and Private School" the objective was to find out the proficiency of the tenth graders in the use of voice. This was a cross-sectional study and found that the girls performed better. Naturally, the students studying in private schools were far better than those of the students studying in public schools were. The study also found that the students preferred active construction to passive construction. Dawadi (1999) in his study "A Comparative Study on the Proficiency in the Use of Defining Relative Clause Made by the Students of Public and Private Schools" attempted to compare the proficiency of students under two different schooling systems; public and private. The findings shows that the students persuing their studies in private schools perform better than the students persuing their studies in public schools. In additional to this, the researcher also found that girls excelled boys.

Karki (2000) in his study entitled "A Comparative Study of Proficiency in the Use of Subject –Verb Agreement between Class 11 and PCL First Year Students in Education Stream". He found out that PCL first year students were more proficient than class 11 students were in the use of Subject –Verb Agreement.

Bhusal (2001) entitled "Correlation between Written and Spoken Answer: A Study on Test Results." In his study he found that majority of the students secured the average score in the written test, most of the students scored lower than the average score in the spoken test, the results of the written and spoken tests were positively correlated. The correlation coefficient was '0.69', which is a substantial relation.

Pakhrin (2008) studied the "Proficiency of the SLC Graduates in the Use of Grammatical Items" and found out that majority of the students were found good according to the SLC standard in the use of grammatical items. Proficiency of the girls was found slightly better than the boys. Similarly, regarding to the grammatical item wise comparison, reported speech and voice were found the most difficult item whereas causative and conditional sentences were found the easiest items.

Many research works have been carried out to find the effectiveness of test items and testing procedure. However, not a great deal of studies has been carried out regarding the topic correlation between grammar in context and grammar in isolation in testing grammar.

# **1.3.** Objectives of the Study

The objectives of the research study were:

- i. to find out the correlation between grammar in context and grammar in isolation;
- ii. to compare the difficulty level of grammar in context and grammar in isolation;
- iii. to suggest some pedagogical implications.

# 1.4. Significance of the Study

This study will be significant for the prospective researchers who want to undertake their researches in testing grammar. Similarly, it will also be significant for all the teachers and testers, as they will have the clear idea of how to test their students' grammatical proficiency. Furthermore, test designers will be benefited from the study who will get the initiative for what type of test should be designed for the school level students and all those stakeholders who are directly or indirectly involved in grammar testing.

# CHAPTER TWO METHODOLOGY

For the fulfillment of the above-mentioned objectives, the researcher adopted the following methodological strategies.

# 2.1. Sources of Data

The study was based on both primary and secondary sources of data. However, the primary sources were the basic for the research.

# 2.1.1. Primary Sources of Data

The study was primarily based on the primary data i.e. the responses made by the students of six private boarding schools and six public schools of Surkhet district to the two different types of test items administered to them.

# 2.1.2. Secondary Sources of Data

Apart from the primary sources of data, some secondary sources were utilized. The researcher thoroughly studied the books by Hatch and Farhady (1982), Harrison (1983), Heaton (1988), Weir (1990), Harmer (1991), Hughes (1995), Venkateswaran (1995), Bhattarai (2005), Khaniya (2005), McCarthy et al. (2009), Cowan(2009),related previous research works, journals, etc. in order to build up theoretical framework of the study and design research tools.

# 2.2 Population of the Study

The total population of the study consisted of the grade 10 students who are preparing for SLC examination.

# **2.3 Sample Population of the Study**

In this study, ninety-six testees, i.e. forty-eight from public schools and forty-eight from private schools were sampled. Both the schools and students were selected using simple random sampling procedure. Among the total number of testees, forty-eight were boys and forty-eight girls. Similarly, four boys and four girls were selected from each school.

#### Table No. 1

#### S.N. Name of the Schools **Remarks** 1 Ananda S.S. 2 Jana Sewa H.S.S. 3 Shiva H.S.S. Public 4 Kopila S.S. 5 Nepal Rastriya S.S. 6 Amar Jyoti H.S.S. 7 Eager Bridge H.S.S. 8 South Asian Scholars' Academy 9 **Emmanuel Secondary Boarding School** Private 10 Elite English Medium S.S. 11 Surkhet Horizon Academy 12 Adarsh Raj Memorial Boarding School

#### **Selected Schools for Sample Population**

# 2.4 Tools for Data Collection

The tool for collecting the data was a test consisting of test items from grammar in context and grammar in isolation based on SLC grids. Both the types of test carries equal marks, i.e. 5 and equal test items, i.e. 10. These varieties of tests items were developed based on eleven grammatical items for SLC students. Therefore, the parallel test items of equal marks were taken into account in both sets of tests.

Each set of test items designed consisted of objective questions with equal marks to find out the correlation coefficient.

# 2.5 Process of Data Collection

After preparing the two sets of test items, the researcher personally visited the twelve randomly selected schools. She explained her purpose to the concerned authorities and cordially requested them for the permission to collect data for the study. Having got the permission, the researcher randomly selected the name of eight students of Grade 10 of each school based on the list of the students provided by the school administration. Then after, the researcher administered the tests to the students. The students were placed on maintaining a considerable distance to prevent students from cheating. Here, the students were asked to read the sentences very carefully and tick the best alternatives within 20 minutes. When the administration process of the test finished, the researcher checked the answer copies.

# 2.6 Limitations of the study

The limitations of this study were as follows:

- i. The study was confined to the grammatical items prescribed by the SLC grid.
- ii. The study was limited to the sample population from Surkhet Valley.
- iii. The study was limited to the six public schools and equal number of private boarding schools.
- iv. The data for this study was collected by administering a written test of objective types.
- v. The study was confined to few school selected randomly.

# CHAPTER THREE ANALYSIS AND INTERPRETATION

This is the central part of this study as it is concerned with the analysis and interpretation of the data obtained to measure the correlation between grammar in context and grammar in isolation. This mainly deals with the analysis of relationship between two different channels of the students' responses and the comparison of difficulty level of these responses.

The grammar in context and grammar in isolation of the selected students with ten full marks for each test were marked applying the "marking rating scale". This scale is called the holistic scale. Obtained score of different groups of students from different schools were listed as a raw score data for the analysis and interpretation of this study. See App. II.

# **3.1.** Analysis of the Correlation

The scores of grammar in context and grammar in isolation of the selected students are collected as two sets (context and isolation) of scores and these series of score are compared together. These responses of the same set of questions through different items of grammars are taken as two different tests for their comparison and the correlation between are studied.

Measurement of the degree of relationship between two or more variables is called correlation analysis. The theory by means of which quantitative connections between two sets of phenomena are determined is called the theory of correlation. In correlation studies, researchers are interested in determining the degree of relationship between pairs of two or more variables. In other words, we can say that correlation studies allow us to determine the extent to which scores on one test are associated with scores on another test.

#### **3.1.1 Mathematical Method**

After calculating the correlation, we should interpret them. The interpretation may differ depending upon the researcher's purpose and the circumstances that may influence the correlation's magnitude. Here, the researcher used the following criterion to evaluate the magnitude of correlation in her data.

#### Table No. 2

Coefficient ( )		cient ( )	Relationship
0.00	to	0.19	Negligible
0.20	to	0.39	Low
0.40	to	0.59	Moderate
0.60	to	0.79	Substantial
0.80	to	1.00	High or Very High

**Scale of Correlation Coefficient** 

# Best and Kahn (2002, p.308)

Therefore, she used the Spearman's rank order correlation (represented by *rho*, ...) formula to calculate the correlation coefficient. The calculated correlation as in the

following table shows that most of the test results have positive correlation between grammar in context and grammar in isolation beyond two schools.

# Table No. 3

**Correlation of Public and Private Schools** 

S.N.	Type of School	[Test]	Correlation
1	Public	[A+B+C+D+E+F]	0.19
2	Private	[G+H+I+J+K+L]	0.38
	0.28		

If we observe the result of public and private schools, we can find that both of them scored positive correlation, i.e. 0.19 and 0.38 respectively. It also shows that public schools carried negligible relation whereas the private schools carried low relation. Thus, correlation coefficient of private schools was better than the public schools.

The total correlation between grammar in context and grammar in isolation is 0.28. This was found out after the calculation of the average relationship between public schools and private schools.

# Table No. 4

# **Correlation of Public and Private Schools with Different Variables**

S.N.	Schools	Variables	Correlation
1	Public	Girls	0.24
		Boys	0.36
2	Private	Girls	0.48
		Boys	0.74

If we analyze the above-mentioned table, the researcher found that correlation of girls in public school was 0.24. It carries the low relation whereas the correlation of boys was 0.36, which was slightly low relation.

On the other hand, if we observe the correlation coefficient of private schools girls and boys we found that correlation of girls is 0.48 whereas the correlation of boys is 0.74, which was moderate and substantial relation respectively.

Thus, the above-mentioned table makes clear that the correlation coefficient of private schools was found better than the public schools.

# Table No. 5

#### **Correlation Coefficient of the Selected Schools**

S.N.	Name of the Schools	Test	Correlation coefficient	Common Rank
1	Ananda S.S.	A (C+I)	0.18	5.5, 5.5
2	Jana Sewa H.S.S.	B (C+I)	0.14	1
3	Shiva H.S.S.	C(C+I)	0.33	7
4	Kopila S.S.	D (C+I)	0.09	-
5	Nepal Rastriya S.S.	E (C+I)	0.70	3
6	Amar Jyoti H.S.S.	F (C+I)	-0.30	-
7	Eager Bridge H.S.S.	G (C+I)	0.56	-
8	South A. Scholars' Academy	H (C+I)	-0.13	-

9	Emmanuel S.S.	I (C+I)	0.76	5,7
10	Elite English M. School	J (C+I)	0.46	-
11	Horizon Academy	K (C+I)	0.33	-
12	Adarsh Raj Memorial	L (C+I)	0.30	4

Table No. 3 shows the correlation coefficient of the test scores obtained by the students of twelve schools. Taking into consideration to the scale presented in 3.1.1 three schools, i.e. Ananda S.S., Janasewa H.S.S. and Kopila S.S. were found in the "negligible" correlation. Similarly, other three schools viz. Shiva H.S.S., Horizon Academy and Adarsh Raj Memorial School were found in "low" correlation. In the same way, Elite English Medium School and Eager Bridge H.S.S. were found in "moderate" correlation. Likewise, two schools, i.e. Nepal Rastriya S.S. and Emmanuel S.S. were found in the "substantial" correlation. However, two schools viz. Amar Jyoti H.S.S. and South Asian Scholar's Academy were found in "negative" correlation. Among the above mentioned 12 schools non of the schools got "high" correlation.

#### **3.1.2. Graphic Method**

#### **Simple Graph**

If we observe the simple graphic representation (see Appendix-V) of the correlation between grammar in context and grammar in isolation, most of the line diagrams show positive correlation, however, the line diagrams of two schools show negative correlation.

After analyzing the two ways of graphic method, the researcher came to know that the line diagrams of public school students' in context goes high than in isolation. On the other hand, the line diagrams of private boarding school students in isolation was high than context. In the same way, if we observe the histograms (see Appendix-IX) of public and private boarding school we can find that the columns of public school students in context went up where as the columns of private boarding school students in isolation was higher than context.

Thus, the researcher concluded that the public school students obtained high marks in context; however, they scored very low marks in isolation. On the contrary, the private school students scored high marks in isolation in comparison with context. Therefore, the relation between context and isolation are not perfectly correlated. Those graphic lines gave only approximate idea. However, with the help of mathematical method we can get the fixed value of the correlation.

#### **3.2.** Analysis of the Difficulty Level

From the correlation analysis we found that, grammar in context and grammar in isolation are not strongly related with each other. Now, a question may arise in our context that which performance is weak and which is strong for the learners. If majority of students secure higher than average marks then it will have lower difficulty level. Similarly, if they secure lower than average marks, the test will have higher difficulty level. The test is not difficult or easy in itself. However, it is taken with the reference of students' proficiency level. Here, the text for a test was taken from grammatical items that are asked in the current SLC examination.

Grammatical items were asked in two ways, i.e. in context and in isolation. The test was administered in written form only. Students' performances were checked separately and were put them in two different groups, i.e. context score and isolation score. If a student has lower proficiency in grammatical items for his/her performance, then the difficulty level of the test should be high and vice-versa.

From the raw data, we can calculate mean and mode of the different tests as the table shows in App. – VI.

This interpretation of the difficulty level can be represented through graphic figures and histograms (App. - VII). If both the lines go together then we can say that they are perfectly correlated. In this research study, neither public school nor private school students' lines have gone together. The line diagram of public school students in context has gone up whereas the line diagrams in isolation of them has limited in X - Axis. On the other hand, the line diagrams of private school students have gone up in isolation. In addition, the line diagrams in context have not equally gone up.

By comparing both public and private schools, we could say that the difficulty level of isolation was high for public school students where as the difficulty level of isolation for private school students was low.

Comparing the location of mean and mode in the data as given below, we can describe the difficulty level of the contextual test and isolation tests.

#### **3.2.1.** The Difficulty Level in Total

From App. VIII we can locate the difficulty level in total.

#### Table No. 6

#### Location of Mean and Mode in Total

S.N.	Test	Mode	Mean	Difficulty Level
1	Context (A – L)	2	2.75	High
2	Isolation (A – L)	2	2.50	High

From the table no.6, it was found that both kinds of tests are difficult because the mode score is lower than the average score. It was also found that majority of the students could not obtain the average mark in both kinds of tests. However, the average score of context is higher than average score of isolation. Therefore, we can say that contextual items were found slightly easier than isolation items.

# 3.2.2. The Difficulty Level in Public and Private Schools

# Table No. 7

S.N.	Types of School	Types of Tests	Mean	Mode	Difficulty Level
1	Public	Context	2.37	2	High
		Isolation	1.75	1.5	High
2	Private	Context	3.11	3.5	Low
		Isolation	3.25	4.5	Low

# Location of mean and mode of Public and private schools

After observing the table above, it was found that for, the students of public schools both the tests were difficult. It is because; majority of the students could not score even the average mark in both tests. On the contrary, for the students of private schools both tests were easy as majority of the students in private schools obtained higher than average mark. For the students of public schools contextual items were easier than the isolation items because the mean score in context was greater than the mean score in isolation. Conversely, isolation items were found easier than contextual items for the students of private schools.

# 3.2.3. The Difficulty Level with Different Variables of Public and Private Schools

Table No. 8

Schools	Variables	Test	Mean	Mode	Difficulty
					Level
Public	Girls	Context	2.5	2	High
		Isolation	1.9	1.5	High
	Boys	Context	2.25	2	High
		Isolation	1.5	2	Low
Private	Girls	Context	3.14	3.5	Low
		Isolation	3.2	3	High
	Boys	Context	3.08	3	High
		Isolation	3.3	4.5	Low

Location of Mean and Mode of Public and Private Schools with Different Variables

Table No. 7 shows that the test items in the both test were felt highly difficult by the girls of public school. In contrast, girls of private school felt easy to take the contextual test. They felt difficult to take the isolation test. However, the boys of both public and private schools felt contextual test difficult and isolation test easier than the contextual one.

# **3.2.4.** The Difficulty Level of the Selected Schools

#### Table No. 9

#### Location of Mean and Mode of the Selected Schools

S.N.	Test	Mean	Mode	Difficulty	Result
				level	

1	Context (A)	2.18	2	High	(Context)	
	Isolation (A)	1.56	2	Low	High	4
2	Context (B)	2.25	3	Low	Low	7
	Isolation (B)	1.8	2.4	Low	Appropriate	1
3	Context (C)	2.9	3.5	Low		
	Isolation(C)	2.06	3.38	Low		
4	Context (D)	2.18	2.5	Low		
	Isolation (D)	1.25	2	Low		
5	Context (E)	2.75	2	High		
	Isolation (E)	2.25	2	High		
6	Context (F)	1.93	2.14	Low	(Isolation)	
	Isolation (F)	1.56	1.5	High	High	4
7	Context (G)	3.12	3.5	Low	Low	8
	Isolation (G)	3.31	4.5	Low		
8	Context (H)	2.37	2.76	Low		
	Isolation (H)	2.25	2	High		
9	Context (I)	2.31	2	High		
	Isolation (I)	2	1	High		
10	Context (J)	3.62	3.5	High		
	Isolation (J)	3.75	6	Low		
11	Context (K)	3.75	4.5	Low		
	Isolation (K)	4.37	4.5	Low		
12	Context (L)	3.5	3.5	Appropriate	ļ	
	Isolation (L)	3.81	4	Low		

**Note:** If the mode value is higher than mean value it has lower difficulty level, if the mode value is equal to mean value it has appropriate difficulty level and if the mode value is, lower than the mean value it has high difficulty.

While analyzing the difficulty level of the selected schools majority of the students felt easy to take the contextual test items, i.e. among twelve, seven schools' students felt comparatively easy to take the contextual test. They obtained higher than the mean score. However, four schools' students felt the contextual test items more difficult than isolation test items. In addition, rest one school's students felt equally difficult to take the both test items.
If we analyze the isolation test, eight schools' students felt easier to take it because majority of the students scored high marks than the average score. Moreover, four schools' students felt the isolation test items more difficult than contextual test items. It is because their obtained marks were lower than average score.

# **CHAPTER FOUR**

## FINDINGS AND RECOMMENDATIONS

### 4.1. Findings

The focal point of every research study is its findings. It also, is the fulfillment of the objective of a study and so is this study. The principal aim of this study is to calculate the correlation between grammar in context and grammar in isolation. Likewise, to find out the difficulty level of these items and to suggest some fruitful recommendations for improvement are other aims of this study.

Altogether, ninety-six students of grade 10 were sampled where forty-eight students were sampled from public schools and equal number of students from private boarding schools. Furthermore, out of ninety-six students fifty percent were girls. Two types of grammatical tests (context and isolation) were taken to develop the tools. Each selected group of students from grade ten was asked to tick ( ) the best alternative. After collecting the data, the recorded answers were checked. Based on this study and the test result analysis the following conclusion can be drawn.

- i. In total, the results of the context and isolation tests were positively correlated. The correlation coefficient was 0.28, which shows the low relation.
- ii. By comparing the results of different schools we found that
  - a. The correlation coefficient of public schools was 0.19 that is negligible relation.
  - b. The correlation coefficient of private schools was 0.38, which shows the low relation. The correlation of private boarding schools was greater than the public schools.

- iii. In the comparison of public and private schools with girls and boys
  - a. The correlation coefficient of public school's boys was 0.36 whereas the correlation coefficient of girls was 0.24.
  - b. The correlation coefficient of private school's boys was 0.74 whereas the correlation coefficient of girls was 0.48.
- iv. In total, majority of the students could not obtain the average score in contextual test. In five full marks, most of them secured two marks where the average score is 2.75.
- v. Similarly, in isolation test most of them could not attain average score. In five full marks, most of them got two marks where the mean value is 2.50.
- vi. The proficiency of private boarding school students was found better in both test items than those from public schools. In private boarding school, most of the students scored 3.5 in context and 4.5 in isolation whereas the mean score was 3.11 and 3.25 respectively. However, the public school students achieved lower than the average marks, i.e. 2 marks in context and 1.5 marks in isolation. The mean value in context was 2.37 and 1.75 in isolation.
- vii. Regarding the grammatical item wise test, public school students did well in contextual test than that of isolation test. On the other hand, the private boarding school students did well in isolation test in comparison to contextual test.
- viii. Most of the public school students were unfamiliar to the both kinds of grammatical tests because their performance was the product of guesswork.
   Similarly, their performance between two tests was significantly different.

- ix. In the comparison of public and private schools with girls and boys
  - a. Public schools' boys did well in isolation; however, the girls were weak in both the grammatical items.
  - b. Private schools' boys did very well in isolation and they were not equally well in contextual items. In the same way, private schools' girls did better in contextual items than isolation.

#### 4.2. Recommendations

Based on the above findings of the study, the following recommendations and pedagogical implications may be made for improving the ELT situation, teaching, and learning process in the use of grammatical items prescribed in the SLC grid.

- i. The students involved in the study showed low performance in grammatical tests, they should be exposed more to the use of grammar in practical life.
- The students and the teachers in the public schools should be very aware of teaching and learning process of grammar since the performance of the sampled students was not satisfactory in both kinds of grammatical tests.
- iii. It would be better to introduce a variety of grammatical exercises related with context and isolation in the concerned teaching materials so that the knowledge and skills in grammatical proficiency of the students will be updated.
- iv. Teachers should bring new trend in teaching grammar. It should not be taught only from out dated grammar translation method. Communicative and discovery techniques should be used.

v. While teaching and learning grammar teachers should also provide appropriate context. As a result, they could apply their knowledge in their real life situations. In the context of private schools, most of the students were familiar with grammatical rules but they failed to apply those rules in the context.

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## **APPENDIX-I**

#### **Tools for Data Collection**

Test Paper to the Students

Student's Name:	S	chool	
Gender:	Class - 10 (SLC)	Full Marks: 10	Time: 20min.

# 1. Tick ( ) the best alternative for the following incomplete sentences from the brackets. $0.5 \times 10 = 5$

- a) This is .....building where we intend to build a house. (a / an / the / nothing)
- b) We have already got rid..... small pox. (from / of / by)
- c) None helped me last week, .....? (didn't he / don't they / didn't they / did they)

d) Fifty kilos of rice ..... bought yesterday. (is / were / was)

e) This newspaper .....twice weekly. (appears / is appearing / will appear)

f) The parents forbade him .....(not to be polite / to be polite / not polite).

g) Do you like tea? Its passive form is: .....?

(Is tea liked \ Is tea being liked \ Does tea liked)

h) .....her illness, she didn't give up working. (In spite of / Because of / Although)

- i) Unless you work hard, you .....the exam. (can pass / would pass / can't pass)
- j) Rebecca got her dress ..... (wash / washed / washing / to wash).

2. Choose and tick ( ) the best alternative in the text given:  $0.5 \times 10 = 5$ Pasang Lhamu Sherpa is an inspirable figure of Nepal. She successfully ..... (scales / scaled / will scale) Mt. Everest in 1993 and became......(a / an / the) first Nepali woman ever to reach the top of the highest peak in the world. She was born..... (in /on / at) December 10, 1961. Had she been born in Terai , she.....(may not climb / might not climb / might not have climbed) over Mt. Everest. She first tried to scale the highest peak.....(because / so that / however) she could not succeed her mission. She was from a family of mountaineers. Her family background made her .....(take / to take / taken) interest on mountaineering. She thought..... (that she would climb / that she will climb / that she can climb) over the highest peak one day. Finally she conquered the Mt. Everest. She ..... (honored / is honored / was honored) by the public after her death. A number of countries.....(has / have / is) honored her. Everybody says that she was brave woman,.....(wasn't she / doesn't he / don't they)?

### **APPENDIX –II**

#### **Answer Key**

# 1. Tick ( ) the best alternative for the following incomplete sentences from the brackets. $0.5 \times 10 = 5$

a) This is <u>the</u> place where we intend to build a house.

b) We have already got rid <u>of</u> small pox.

c) None helped me last week, did they?

d) Fifty-kilos of rice was bought yesterday.

e) This newspaper <u>appears</u> twice weekly.

f) The parents forbade him to be polite.

g) Do you like tea? Its passive form is, <u>Is tea liked</u>?

h) <u>In spite of her illness</u>, she did not give up working.

i) Unless you work hard, you <u>cannot pass</u> the exam.

j) Rebecca got her dress <u>washed</u>.

2. Choose and tick ( ) the best alternative in the text given:  $0.5 \times 10 = 5$ 

Pasang Lhamu Sherpa is an inspirable figure of Nepal. She successfully <u>scaled</u> Mt. Everest in 1993 and became <u>the</u> first Nepali woman ever to reach the top of the highest peak in the world. She was born <u>on</u> December 10, 1961. Had she been born in Terai she <u>might not have climbed</u> over Mt. Everest. She first tried to scale the highest peak <u>however</u>; she could not succeed her mission. She was from a family of mountaineers. Her family background made her <u>take</u> interest on mountaineering. She thought <u>that she would climb</u> over the highest peak one day. Finally, she conquered the Mt. Everest. She <u>was honored</u> by the public after her death. A number of countries <u>have</u> honored her. Everybody says that she was brave woman, <u>wasn't she?</u>

## **APPENDIX** – III Names of Schools and Students with their Obtained Marks in the Tests

Ananda Secondary School			
S.N.	Students'	Marks Obtained	
	Name	Full Marks = 10	
		Context	Isolation
1	Bimala	3	1.5
2	Sita	2.5	2
3	Mina	2.5	2
4	Gangaram	2	1
5	Prashnna	2	1
6	Sita Ram	2	0.5
7	Ganga	2	2.5
8	Kalam	1.5	2

#### Jana Sewa H. Secondary School

S.N.	Students'	Marks Obtained	
	Name	Full Marks = 10	
		Context	Isolation
1	Suraj	3.5	3
2	Ranjana	3	1
3	Roshan	2.5	1.5
4	Dev Ku.	2.5	2.5
5	Deepak	2	2
6	Devi	2	1
7	Amrita	1.5	1.5
8	Nabin	1	2

#### Shiva H. Secondary School

S.N.	Students'	Marks Obtained		
	Name	Full Marks = 10		
		Context	Isolation	
1	Gaura	4	2.5	
2	Srijana	3.5	1	
3	KhimBdr	3.5	3	
4	Sailesh	3.5	2.5	
5	Tara	3	2.5	
6	Shristi	2.5	3	

7	Rakham	2	1		
8	Ganesh	1.5	1		
Kopila	Kopila Secondary School				
S.N.	Students'	Marks O	btained		
	Name	Full Mar	ks = 10		
		Context	Isolation		
1	Sita	4	1.5		
2	Laxmi	2.5	1.5		
3	Nim Bdr.	2.5	2		
4	Ramesh	2.5	0.5		
5	Chandika	2	1.5		
6	YamBdr.	2	0.5		
7	Shiva	1	0.5		
8	Amrita	1	2		

### Nepal Rastriya Secondary School

S.N.	Students'	Marks Obtained	
	Name	Full Marks = 10	
		Context	Isolation
1	Shova	4	3.5
2	Ganesh	4	3
3	Swastika	3	2.5
4	Yagya	2.5	2
5	Yogendra	2.5	1.5
6	Thuma	2	1.5
7	Sharada	2	2
8	Roshan	2	2

# Amar Jyoti H. Secondary School

S.N.	Students'	Marks Obtained	
	Name	Full Marks = 10	
		Context	Isolation
1	Deepen	3.5	1
2	Gangaram	2.5	0.5
3	Manju	2.5	2.5

4	Sarita	2	1
5	Khima	2	3
6	Deepak	1.5	1.5
7	Dil Maya	1	1.5
8	Yubaraj	0.5	1.5
Eager Bridge Secondary School			
S.N.	Students'	Marks O	btained
	Name	Full Mar	ks = 10
		Context	Isolation
1	Kamala	4.5	3
2	Sapana	3.5	4.5
3	Diamond	3.5	4.5
4	Rajkumar	3.5	4
5	Sita	3	2.5
6	Milan	3	4.5
7	Aslim	2	2
8	Lucky	2	1.5

#### South Asian Scholar's Academy

S.N.	Students'	Marks Obtained	
	Name	Full Marks = 10	
		Context	Isolation
1	Asmita	4	2
2	Sapana	3	3
3	Tufan	3	2
4	Rama	2.5	2
5	Purna	2	2
6	Subash	2	2.5
7	Samjhana	1.5	2
8	Bishal	1	2.5

### **Emmanuel Secondary School**

S.N.	Students'	Marks Obtained	
	Name	Full Marks = 10	
		Context	Isolation
1	Lok	3.5	2.5
2	Luna	3.5	3
3	Anil	3	3.5
4	Sarjan	2	1.5
5	Pabitra	2	1
6	Laxmi	2	2.5
7	Tika	1.5	1

8 Deepa	1	1
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## **Elite English Medium School**

S.N.	Students'	Marks Obtained	
	Name	Full Marks = 10	
		Context	Isolation
1	Rhombus	4.5	4.5
2	Narayan	4.5	4.5
3	Bhanu	4	5
4	Sapana	3.5	2.5
5	Kabita	3.5	3
6	Gita	3.5	3
7	Laxman	3	4.5
8	Sagar	2.5	3

#### Surkhet Horizon Academy

S.N.	Students'	Marks Obtained			
	Name	Full Mar	ks = 10		
		Context	Isolation		
1	Dinesh	5	4.5		
2	Rajesh	5	4.5		
3	Dipti	4.5	4		
4	Durga	4	5		
5	Ajiullah	3.5	5		
6	Manju	3	3.5		
7	Binod	3	4.5		
8	Saahina	2	4		

## **Adarsh Raj Memorial School**

S.N.	Students'	Marks Obtained			
	Name	Full Marks = 10			
		Context	Isolation		
1	Binod	4.5	4.5		
2	Gita	4	3.5		
3	Roshan	3.5	3.5		
4	Anju	3.5	4.5		
5	Pujan	3	4		
6	Prakash	3	2.5		
7	Shristee	3	4		

8 Kamlesh 3.5 4	8	Kamlesh	3.5	4
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## **APPENDIX - IV**

## School wise Correlation Coefficient between Grammar in Context and Grammar in Isolation

## TEST – A School: Ananda Secondary School

Student's	Context	Isolation	Rank	Rank	$r_1 - r_2$	$d^2$
Name	(X)	(Y)	( <b>r</b> <sub>1</sub> )	(r <sub>2</sub> )	(d)	
Bimala	3	1.5	1	5	-4	16
Sita	2.5	2	2.5	3	-0.5	0.25
Mina	2.5	2	2.5	3	-0.5	0.25
Ganga Ram	2	1	5.5	6.5	-1	1
Prashanna	2	1	5.5	6.5	-1	1
Sita Ram	2	0.5	5.5	8	-2.5	6.25
Ganga	2	2.5	5.5	1	4.5	20.25
Kalam	1.5	2	8	3	5	25
N = 8						70

We have,

... = 1 - 
$$\frac{6\left[\Sigma d^{2} + \frac{1}{12}(m^{3} - m) + \frac{1}{12}(n^{3} - n) + \frac{1}{12}(p^{3} - p) + \frac{1}{12}(r^{3} - r)\right]}{N(N^{2} - 1)}$$

$$=1-\frac{6\left[70+\frac{1}{12}\times 6+\frac{1}{12}\times 60+\frac{1}{12}\times 24+\frac{1}{12}\times 6\right]}{8\times 63}$$

 $=1 - \frac{6 \times 78}{504}$ 

=1-0.92

= 0.08 (+ve, negligible)

TEST –	B				
School:	Jana	Sewa	Higher	Secondar	y

Student's	Context	Isolation	Rank	Rank	r <sub>1</sub> -r <sub>2</sub>	$d^2$
Name	(X)	(Y)	( <b>r</b> <sub>1</sub> )	(r <sub>2</sub> )	(d)	
Suraj	3.5	3	1	1	0	0
Ranjana	3	1	2	7.5	-5.5	30.25
Roshan	2.5	1.5	3.5	4.5	-1	1
Dev Kumari	2.5	2.5	3.5	2	1.5	2.25
Deepak	2	2	4.5	3.5	1	1
Dev Kumari	2	1	4.5	7.5	-3	9
Amrita	1.5	1.5	7	4.5	2.5	6.25
Nabin	1	2	8	3.5	4.5	20.25
N = 8						70

$$\dots = 1 - \frac{6\left[\Sigma d^2 + \frac{1}{12}(m^3 - m) + \frac{1}{12}(n^3 - n) + \frac{1}{12}(p^3 - p) + \frac{1}{12}(r^3 - r) + \frac{1}{12}(s^3 - s)\right]}{N(N^2 - 1)}$$

$$=1-\frac{6\left[70+\frac{1}{12}\times 6+\frac{1}{12}\times 6+\frac{1}{12}\times 6+\frac{1}{12}\times 6+\frac{1}{12}\times 6+\frac{1}{12}\times 6\right]}{8\times 63}$$

$$=1-\frac{6\times72.5}{504}$$

=1-0.86

TEST- C			
School: Shiva	Higher	Secondary	School

Student's	Context	Isolation	Rank	Rank	r <sub>1</sub> -r <sub>2</sub>	$d^2$
Name	(X)	(Y)	(r <sub>1</sub> )	(r <sub>2</sub> )	(d)	
Gaura	4	2.5	1	4	-3	9
Srijana	3.5	1	3	7	-4	16
Khim Bdr.	3.5	3	3	1.5	1.5	2.25
Shailesh	3.5	2.5	3	4	-1	1
Tara	3	2.5	5	4	1	1
Shristi	2.5	3	6	1.5	4.5	20.25
Rakham	2	1	7	7	0	0
Ganesh	1.5	1	8	7	1	1
N = 8						50.5

$$\dots = 1 - \frac{6\left[\Sigma d^2 + \frac{1}{12}(m^3 - m) + \frac{1}{12}(n^3 - n) + \frac{1}{12}(p^3 - p) + \frac{1}{12}(r^3 - r)\right]}{N(N^2 - 1)}$$

$$=1-\frac{6\left[50.5+\frac{1}{12}\times24+\frac{1}{12}\times6+\frac{1}{12}\times24+\frac{1}{12}\times24\right]}{8\times63}$$

 $=1 - \frac{6 \times 57}{504}$ 

=1-0.67

=0.33 (+ve, low)

Student's	Context	Isolation	Rank	Rank	$r_1-r_2$	$d^2$
Name	(X)	(Y)	( <b>r</b> <sub>1</sub> )	(r <sub>2</sub> )	(d)	
Sita	4	1.5	1	4	-3	9
Laxmi	2.5	1.5	3	4	-1	1
Nim Bdr.	2.5	2	3	1.5	1.5	2.25
Ramesh	2.5	0.5	3	7	-4	16
Chandika	2	1.5	5.5	4	1.5	2.25
Yam Bdr.	2	0.5	5.5	7	-1.5	2.25
Shiva	1	0.5	7.5	7	0.5	0.25
Amrita	1	2	7.5	1.5	6	36
N = 8						69

TEST – D School: Kopila Secondary School

$$\dots = 1 - \frac{6\left[\Sigma d^2 + \frac{1}{12}(m^3 - m) + \frac{1}{12}(n^3 - n) + \frac{1}{12}(p^3 - p) + \frac{1}{12}(r^3 - r) + \frac{1}{12}(s^3 - s) + \frac{1}{12}(t^3 - t)\right]}{N(N^2 - 1)}$$

$$=1-\frac{6\left[69+\frac{1}{12}\times24+\frac{1}{12}\times6+\frac{1}{12}\times6+\frac{1}{12}\times6+\frac{1}{12}\times6+\frac{1}{12}\times24+\frac{1}{12}\times24\right]}{8\times63}$$

$$=1-\frac{6\times76.5}{504}$$

=1-0.91

Student's	Context	Isolation	Rank	Rank	<b>r</b> <sub>1</sub> - <b>r</b> <sub>2</sub>	$d^2$
Name	(X)	(Y)	(r <sub>1</sub> )	(r <sub>2</sub> )	(d)	
Shova	4	3.5	1.5	1	0.5	0.25
Ganesh	4	3	1.5	2	-0.5	02.5
Swastika	3	2.5	3	3	0	0
Yagya	2.5	2	4.5	5	-0.5	0.25
Yogendra	2.5	1.5	4.5	7.5	-3	9
Thuma	2	1.5	7	7.5	-0.5	0.25
Sharada	2	2	7	5	2	4
Roshan	2	2	7	5	2	4
N = 8						20.25

TEST – E School: Nepal Rastriya Secondary School

$$\dots = 1 - \frac{6\left[\Sigma d^2 + \frac{1}{12}(m^3 - m) + \frac{1}{12}(n^3 - n) + \frac{1}{12}(p^3 - p) + \frac{1}{12}(r^3 - r) + \frac{1}{12}(s^3 - s)\right]}{N(N^2 - 1)}$$

$$=1-\frac{6\left[20.25+\frac{1}{12}\times6+\frac{1}{12}\times6+\frac{1}{12}\times24+\frac{1}{12}\times6+\frac{1}{12}\times24\right]}{8\times63}$$

$$=1-\frac{6 \times 25.75}{504}$$

=1-0.30

Student's	Context	Isolation	Rank	Rank	$r_1 - r_2$	$d^2$
Name	(X)	(Y)	(r <sub>1</sub> )	(r <sub>2</sub> )	(d)	
Deepen	3.5	1	1	6.5	-5.5	30.25
Ganga Ram	2.5	0.5	2.5	8	-5.5	30.25
Manju	2.5	2.5	2.5	2	0.5	0.25
Sarita	2	1	4.5	6.5	-2	4
Khima	2	3	4.5	1	3.5	12.25
Dipak	1.5	1.5	6	4	2	4
Dilmaya	1	1.5	7	4	3	9
Yubaraj	0.5	1.5	8	4	4	16
N = 8						106

TEST – F School: Amar Jyoti Higher Secondary School

... = 1 - 
$$\frac{6\left[\Sigma d^{2} + \frac{1}{12}(m^{3} - m) + \frac{1}{12}(n^{3} - n) + \frac{1}{12}(p^{3} - p) + \frac{1}{12}(r^{3} - r)\right]}{N(N^{2} - 1)}$$

$$=1 - \frac{6 \left[106 + \frac{1}{12} \times 6 + \frac{1}{12} \times 6 + \frac{1}{12} \times 24 + \frac{1}{12} \times 6\right]}{8 \times 63}$$

$$=1-\frac{6\times 109.5}{504}$$

=1-1.30

$$=-0.30$$
 (-ve, low)

## TEST – G

Student's	Context	Isolation	Rank	Rank	$r_1-r_2$	$d^2$
Name	(X)	(Y)	( <b>r</b> <sub>1</sub> )	(r <sub>2</sub> )	(d)	
Kamala	4.5	3	1	5	-4	16
Sapana	3.5	4.5	3	2	1	1
Diamond	3.5	4.5	3	2	1	1
Raj Kumar	3.5	4	3	4	-1	1
Sita	3	2.5	5.5	6	-0.5	0.25
Milan	3	4.5	5.5	2	3.5	12.25
Aslim	2	2	7.5	7	0.5	0.25
Lucky	2	1.5	7.5	8	-0.5	0.25
N = 8						32

School: Eager Bridge Higher Secondary School

We have,

$$\dots = 1 - \frac{6\left[\Sigma d^2 + \frac{1}{12}(m^3 - m) + \frac{1}{12}(n^3 - n) + \frac{1}{12}(p^3 - p) + \frac{1}{12}(r^3 - r)\right]}{N(N^2 - 1)}$$

[m=3; n=2; p=2 and r=3]  
= 
$$1 - \frac{6\left[32 + \frac{1}{12} \times 24 + \frac{1}{12} \times 6 + \frac{1}{12} \times 6 + \frac{1}{12} \times 24\right]}{2}$$

$$= 1 - \frac{6 \times 37}{504}$$
  
= 1-0.44

= 0.56 (+ve, moderate)

TEST –	H			
School:	South	Asian	Scholar's	Academy

Student's	Context	Isolation	Rank	Rank	<b>r</b> <sub>1</sub> - <b>r</b> <sub>2</sub>	$d^2$
Name	(X)	(Y)	( <b>r</b> <sub>1</sub> )	(r <sub>2</sub> )	(d)	
Asmita	4	2	1	6	-5	25
Sapana	3	3	2.5	1	1.5	2.25
Tufan	3	2	2.5	6	-3.5	12.25
Rama	2.5	2	4	6	-2	4
Purna Bdr.	2	2	5.5	6	-0.5	0.25
Subash	2	2.5	5.5	2.5	3	9
Samjhana	1.5	2	7	6	1	1
Bishal	1	2.5	8	2.5	5.5	30.25
N = 8						84

$$\dots = 1 - \frac{6\left[\Sigma d^{2} + \frac{1}{12}(m^{3} - m) + \frac{1}{12}(n^{3} - n) + \frac{1}{12}(p^{3} - p) + \frac{1}{12}(r^{3} - r)\right]}{N(N^{2} - 1)}$$

$$[m=2; n=2; p=2 \text{ and } r=5]$$

$$= 1 - \frac{6\left[84 + \frac{1}{12} \times 6 + \frac{1}{12} \times 6 + \frac{1}{12} \times 6 + \frac{1}{12} \times 120\right]}{8 \times 63}$$

$$= 1 - \frac{6 \times 95.5}{504}$$

$$= 1 - 1.13$$

$$= -0.13 (-ve, negligible)$$

Student's	Context	Isolation	Rank	Rank	r <sub>1</sub> -r <sub>2</sub>	$d^2$
Name	(X)	(Y)	( <b>r</b> <sub>1</sub> )	(r <sub>2</sub> )	(d)	
Lok Prd.	3.5	2.5	1.5	3.5	-2	4
Luna	3.5	3	1.5	2	-0.5	0.25
Anil	3	3.5	3	1	2	4
Sarjan	2	1.5	5	5	0	0
Pabitra	2	1	5	7	-2	4
Laxmi	2	2.5	5	3.5	1.5	2.25
Tika	1.5	1	7	7	0	0
Deepa	1	1	8	7	1	1
N = 8						15.5

TEST-ISchool: Emmanuel Secondary School

$$\dots = 1 - \frac{6\left[\Sigma d^2 + \frac{1}{12}(m^3 - m) + \frac{1}{12}(n^3 - n) + \frac{1}{12}(p^3 - p) + \frac{1}{12}(r^3 - r)\right]}{N(N^2 - 1)}$$

[m=2; n=3; p=2 and r=3]  
=1-
$$\frac{6\left[15.5 + \frac{1}{12} \times 6 + \frac{1}{12} \times 24 + \frac{1}{12} \times 6 + \frac{1}{12} \times 24\right]}{2}$$

 $=1-\frac{6 \times 20.5}{504}$ 

=1-0.24

## TEST- J School: Elite English Medium Secondary School

Student's	Context	Isolation	Rank	Rank	r <sub>1</sub> -r <sub>2</sub>	$d^2$
Name	(X)	(Y)	(r <sub>1</sub> )	(r <sub>2</sub> )	(d)	
Rhombus	4.5	4.5	1.5	3	-1.5	2.25
Narayan	4.5	4.5	1.5	3	-1.5	2.25
Bhanu	4	5	3	1	2	4
Kabita	3.5	2.5	5	8	-3	9
Geeta	3.5	3	5	6	-1	1
Sapana	3.5	3	5	6	-1	1
Laxman	3	4.5	7	3	4	16
Sagar	2.5	3	8	6	2	4
N = 8						39.5

We have,

... = 1 - 
$$\frac{6\left[\Sigma d^{2} + \frac{1}{12}(m^{3} - m) + \frac{1}{12}(n^{3} - n) + \frac{1}{12}(p^{3} - p) + \frac{1}{12}(r^{3} - r)\right]}{N(N^{2} - 1)}$$

$$=1-\frac{6\left[39.5+\frac{1}{12}\times 6+\frac{1}{12}\times 24+\frac{1}{12}\times 24+\frac{1}{12}\times 24\right]}{8\times 63}$$

 $=1-\frac{6\times 46}{504}$ =1-0.54

## TEST – K School: Surkhet Horizon Academy

Student's	Context	Isolation	Rank	Rank	$r_1-r_2$	$d^2$
Name	(X)	(Y)	(r <sub>1</sub> )	(r <sub>2</sub> )	(d)	
Dinesh	5	4.5	1.5	4	-2.5	6.25
Rajesh	5	4.5	1.5	4	-2.5	6.25
Dipti	4.5	4	3	6.5	-3.5	12.25
Durga	4	5	4	1.5	2.5	6.25
Ajiullah	3.5	5	5	1.5	3.5	12.25
Manju	3	3.5	6.5	8	-1.5	2.25
Binod	3	4.5	6.5	4	2.5	6.25
Saahina	2	4	8	6.5	1.5	2.25
N = 8						54

We have,

$$\dots = 1 - \frac{6\left[\Sigma d^2 + \frac{1}{12}(m^3 - m) + \frac{1}{12}(n^3 - n) + \frac{1}{12}(p^3 - p) + \frac{1}{12}(r^3 - r) + \frac{1}{12}(s^3 - s)\right]}{N(N^2 - 1)}$$

$$=1-\frac{6\left[54+\frac{1}{12}\times6+\frac{1}{12}\times6+\frac{1}{12}\times6+\frac{1}{12}\times24+\frac{1}{12}\times6\right]}{8\times63}$$

 $=1-\frac{6\times58}{504}$ 

=1-0.69

=0.31 (+ve, low)

TEST –	L				
School:	Adarsh	Raj	Memorial	Boarding	School

Student's	Context	Isolation	Rank	Rank	$r_1-r_2$	$d^2$
Name	(X)	(Y)	(r <sub>1</sub> )	(r <sub>2</sub> )	(d)	
Binod	4.5	4.5	1	1.5	-0.5	0.25
Geeta	4	3.5	2	6.5	-4.5	20.25
Roshan	3.5	3.5	4	6.5	-2.5	6.25
Anju	3.5	4.5	4	1.5	2.5	6.25
Kamlesh	3.5	4	4	4	0	0
Pujan	3	4	7	4	3	9
Prakash	3	2.5	7	8	-1	1
Shristee	3	4	7	4	3	9
N = 8						52

We have,

$$\dots = 1 - \frac{6\left[\Sigma d^2 + \frac{1}{12}(m^3 - m) + \frac{1}{12}(n^3 - n) + \frac{1}{12}(p^3 - p) + \frac{1}{12}(r^3 - r) + \frac{1}{12}(s^3 - s)\right]}{N(N^2 - 1)}$$

$$=1-\frac{6\left[52+\frac{1}{12}\times24+\frac{1}{12}\times24+\frac{1}{12}\times6+\frac{1}{12}\times24+\frac{1}{12}\times6\right]}{8\times63}$$

 $=1 - \frac{6 \times 59}{504}$ 

=1-0.70

=0.30 (+ve, low)

# **Correlation coefficient of Girls and Boys of Public and Private Schools**

Students' Name	Context	Isolation	Rank $(r_1)$	Rank (r <sub>2</sub> )	r <sub>1</sub> -r <sub>2</sub> (d)	$d^2$
Bimala	2	1.5	17.5	17	0.5	0.25
Sita	2.5	2	10.5	11.5	-1	1
Mina	2.5	2	10.5	11.5	-1	1
Ganga	2	2.5	17.5	6.5	11	121
Ranjana	3	1	6	22.5	-16.5	272.25
Dev kumari	2.5	2.5	10.5	6.5	4	16
Dev kumari	2	1	17.5	22.5	-5	25
Amrita	1.5	1.5	22	17	5	25
Gaura	4	2.5	2	6.5	-4.5	20.25
Kumari						
Sirjana	3.5	1	4	22.5	-18.5	342.25
Tara	3	2.5	6	6.5	-0.5	0.25
Shristi	2.5	3	10.5	2.5	8	64
Sita	4	1.5	2	17	-15	225
Laxmi	2.5	1.5	10.5	17	-6.5	42.25
Chandika	2	1.5	17.5	17	0.5	0.25
Amrita	1	2	23.5	11.5	12	144
Shova	4	3.5	2	1	1	1
Swastika	3	2.5	6	6.5	-0.5	0.25
Thuma	2	1.5	17.5	17	0.5	0.25
Sarda	2	2	17.5	11.5	6	36
Manju	2.5	2.5	10.5	6.5	4	16
Sarita	2	1	17.5	22.5	-5	25
Khima	2	3	17.5	2.5	15	225
Dilmaya	1	1.5	23.5	17	6.5	42.25
N = 24						1645.5

## Girls of Public schools

We have,

$$\dots = 1 - \frac{6 \sum_{i=1}^{n} \frac{1}{2} (m^{2} - m) + \frac{1}{12} (n^{3} - n) + \frac{1}{12} (p^{3} - p) + \frac{1}{12} (r^{3} - r) + \frac{1}{12} (s^{3} - s) + \frac{1}{12} (r^{3} - r) + \frac{1}{12} (r^{3} - r)$$

$$[m = 3; n = 3; p = 6; r = 8; s = 2; t = 2; v = 6; w = 4; y = 7 and z = 4]$$

$$=1-\frac{6\left[16455+\frac{1}{12}\times24+\frac{1}{12}\times24+\frac{1}{12}\times210+\frac{1}{12}\times504+\frac{1}{12}\times6+\frac{1}{12}\times6+\frac{1}{12}\times210+\frac{1}{12}\times60+\frac{1}{12}\times336+\frac{1}{12}\times60\right]}{24\times575}$$

 $=1-\frac{6 \times 1765.5}{13800}$ 

=1-0.76

= 0.24 (+ve, low)

# **Boys of Public Schools**

Students'	Context	Isolation	Rank $(r_1)$	Rank $(r_2)$	$r_1-r_2$	$d^2$

Name					(d)	
Ganga Ram	2	1	15	17	-2	4
Prashnna	2	1	15	17	-2	4
Sita Ram	2	0.5	15	22	-7	49
Kalam	1.5	2	20	7.5	12.5	156.25
Suraj	3.5	3	3.5	2	1.5	2.25
Roshan	2.5	1.5	8.5	12.5	-4	16
Deepak	2	2	15	7.5	7.5	56.25
Nabin	1	2	22.5	7.5	15	225
Khim Bdr.	3.5	3	3.5	2	1.5	2.25
Sailesh	3.5	2.5	3.5	4	-0.5	0.25
Rakham	2	1	15	17	-2	4
Ganesh	1.5	1	20	17	3	9
Nim Bdr.	2.5	2	8.5	7.5	1	1
Ramesh	2.5	0.5	8.5	22	-13.5	182.25
Yam Bdr.	2	0.5	15	22	-7	49
Shiva	1	0.5	22.5	22	0.5	0.25
Ganesh	4	3	1	2	-1	1
Yagya	2.5	2	8.5	7.5	1	1
Yogendra	2.5	1.5	8.5	12.5	-4	16
Roshan	2	2	15	7.5	7.5	56.25
Deepen	3.5	1	3.5	17	-13.5	182.25
Ganga Ram	2.5	0.5	8.5	22	-13.5	182.25
Deepak	1.5	1.5	20	12.5	7.5	56.25
Yuba Raj	0.5	1.5	24	12.5	11.5	132.25
N = 24						1388

$$\dots = 1 - \frac{\oint \sum d^2 + \frac{1}{12}(m^3 - m) + \frac{1}{12}(n^3 - n) + \frac{1}{12}(p^3 - p) + \frac{1}{12}(r^3 - r) + \frac{1}{12}(s^3 - s) + \frac{1}{12}(r^3 - r) + \frac{1}$$

$$[m = 4; n = 6; p = 7; r = 3; s = 2; t = 3; v = 6; w = 4; y = 5 and z = 5]$$

$$=1-\frac{6\left[1388+\frac{1}{12}\times60+\frac{1}{12}\times210+\frac{1}{12}\times336+\frac{1}{12}\times24+\frac{1}{12}\times6+\frac{1}{12}\times24+\frac{1}{12}\times210+\frac{1}{12}\times60+\frac{1}{12}\times120+\frac{1}{12}\times120\right]}{24\times575}$$

- $= 1 \frac{6 \times 1485.5}{13800}$
- = 1- 0.64

$$= 0.36$$
 (+ve low)

## **Girls of Private Schools**

Students'	Context	Isolation	Rank $(r_1)$	Rank (r <sub>2</sub> )	<b>r</b> <sub>1</sub> - <b>r</b> <sub>2</sub>	$d^2$
Name					(d)	
Kamala	4.5	3	1.5	14	-12.5	156.25

Sapana	3.5	4.5	10	4	6	36
Diamond	3.5	4.5	10	4	6	36
Sita	3	2.5	16	18	-2	4
Asmita	4	2	4.5	21	-16.5	272.25
Sapana	3	3	16	14	2	4
Rama	2.5	2	19	21	-2	4
Samjhana	1.5	2	23	21	2	4
Luna	3.5	3	10	14	-4	16
Pabitra	2	1	21	23.5	-2.5	6.25
Laxmi	2	2.5	21	18	3	9
Deepa	1	1	24	23.5	0.5	0.25
Sapana	3.5	2.5	10	18	-8	64
Kabita	3.5	3	10	14	-4	16
Gita	3.5	3	10	14	-4	16
Bhanu	4	5	4.5	1.5	3	9
Dipti	4.5	4	1.5	7.5	-6	36
Durga	4	5	4.5	1.5	3	9
Manju	3	3.5	16	10.5	5.5	30.25
Saahina	2	4	21	7.5	13.5	182.25
Geeta	4	3.5	4.5	10.5	-6	36
Anju	3.5	4.5	10	4	6	36
Pujan	3	4	16	7.5	8.5	72.25
Shristee	3	4	16	7.5	8.5	72.25
N = 24						1127

 $\frac{\left[\left[\Sigma d^{2} + \frac{1}{12}(n^{3} - n) + \frac{1}{12}(n^{3} - n) + \frac{1}{12}(p^{3} - p) + \frac{1}{12}(q^{3} - q) + \frac{1}{12}(n^{3} - r) + \frac{1}{12}(s^{3} - s) + \frac{1}{12}(t^{3} - r) + \frac{1}{12}(u^{3} - n) + \frac{1}$ 

$$[m = 2; n = 4; p = 7; q = 5; r = 3; s = 2; t = 3; u = 4; v = 2; w = 5; x = 3; y = 3 and z = 2]$$

$$=1-\frac{6\left[1127\frac{1}{12}\times6+\frac{1}{12}\times60+\frac{1}{12}\times336\frac{1}{12}\times120\frac{1}{12}\times24+\frac{1}{12}\times6+\frac{1}{12}\times24+\frac{1}{12}\times60+\frac{1}{12}\times6+\frac{1}{12}\times120\frac{1}{12}\times24+\frac{1}{12}\times6+\frac{1}{12}\times24+\frac{1}{12}\times6+\frac{1}{12}\times120\frac{1}{12}\times24+\frac{1}{12}\times6+\frac{1}{12}\times120\frac{1}{12}\times24+\frac{1}{12}\times6+\frac{1}{12}\times120\frac{1}{12}\times12$$

- $= 1 \frac{6 \times 1195}{13800}$
- = 1-0.52

$$= 0.48$$
 (+ve, moderate)

# **Boys of Private Schools**

Students'	Context	Isolation	Rank $(r_1)$	Rank (r <sub>2</sub> )	<b>r</b> <sub>1</sub> - <b>r</b> <sub>2</sub>	$d^2$
Name					(d)	
Milan	3	4.5	13.5	5.5	8	64

Aslim	2	2	20	20	0	0
Lucky	2	1.5	20	22.5	-2.5	6.25
Raj Kumar	3.5	4	8	10.5	-2.5	6.25
Tufan	3	2	13.5	20	-6.5	42.25
Purna Bdr.	2	2	20	20	0	0
Subash	2	2.5	20	16.5	3.5	12.25
Bishal	1	2.5	24	16.5	7.5	56.25
Lok	3.5	2.5	8	16.5	-8.5	72.25
Anil	3	3.5	13.5	12.5	1	1
Sarjan	2	1.5	20	22.5	-2.5	6.25
Tika	1.5	1	23	24	-1	1
Rhombus	4.5	4.5	4	5.5	-1.5	2.25
Narayan	4.5	4.5	4	5.5	-1.5	2.25
Laxman	3	4.5	13.5	5.5	8	64
Sagar	2.5	3	17	14	3	9
Dinesh	5	4.5	1.5	5.5	-4	16
Rajesh	5	4.5	1.5	5.5	-4	16
Ajiullah	3.5	5	8	1	7	49
Binod	3	4.5	13.5	5.5	8	64
Binod	4.5	4.5	4	5.5	-1.5	2.25
Roshan	3.5	3.5	8	12.5	-4.5	20.25
Prakash	3	2.5	13.5	16.5	-3	9
Kamlesh	3.5	4	8	10.5	-2.5	6.25
N = 24						528

 $\frac{\left[\Sigma_{d}^{2} + \frac{1}{12}(n^{3} - n) + \frac{1}{12}(n^{3} - n) + \frac{1}{12}(p^{3} - p) + \frac{1}{12}(q^{3} - q)\frac{1}{12}(r^{3} - r) + \frac{1}{12}(s^{3} - s) + \frac{1}{12}(r^{3} - r) + \frac{1}{12$ 

$$[m = 2; n = 3; p = 5; q = 6; r = 5; s = 8; t = 2; v = 2; w=4; x=3; and y=2]$$

$$=1-\frac{6\left[528+\frac{1}{12}\times6+\frac{1}{12}\times24+\frac{1}{12}\times120+\frac{1}{12}\times210+\frac{1}{12}\times120+\frac{1}{12}\times504+\frac{1}{12}\times6+\frac{1}{12}\times6+\frac{1}{12}\times60+\frac{1}{12}\times24+\frac{1}{12}\times6\right]}{24\times575}$$

- $= 1 \frac{6 \times 618.5}{13800}$
- = 1- 0.26
- = 0.74 (+ve, substantial)

## **APPENDIX** – V Line Diagram of Correlation between Grammar in Context and Grammar in Isolation

#### Ananda Secondary School (Test – A)







Shiva Higher Secondary School (Test – C)







Nepal Rastriya Secondary School (Test – E)






South Asian Scholar's Academy (Test - H)



#### **Emmanuel Secondary Boarding School (Test – I)**



Elite English Medium School (Test – J)







Adarsh Raj Memorial Boarding School (Test – L)

# **APPENDIX - VI** Calculation of Mean and Mode

#### Ananda Secondary School Grammar in Context

Or within the		
Marks (x)	No. of	fx
	Students	
	(f)	
0.5	0	0
1	0	0
1.5	1	1.5
2	4	8
2.5	2	5
3	1	3
3.5	0	0
4	0	0
4.5	0	0
5	0	0
	N = 8	17.5

Marks (x)	No. of	fx
	Students	
	(f)	
0.5	1	0.5
1	2	2
1.5	1	1.5
2	3	6
2.5	1	2.5
3	0	0
3.5	0	0
4	0	0
4.5	0	0
5	0	0
	N = 8	12.5

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{17.5}{8} = 2.18$$
  
Mode = 2

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{12.5}{8} = 1.56$$
  
Mode = 2

## Jana Sewa Higher Secondary School

## **Grammar in Context**

Marks (x)	No. of	fx
	Students	
	(f)	
0.5	0	0
1	1	1
1.5	1	1.5
2	2	4
2.5	2	5
3	1	3
3.5	1	3.5
4	0	0
4.5	0	0
5	0	0
	N = 8	18

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{18}{8} = 2.25$$

Mode = 3Median-2Mean  
[Median = 2.5]  
= 
$$3 \times 2.5 - 2 \times 2.25$$
  
= 3

#### **Grammar in Isolation**

Marks (x)	No. of	fx
	Students	
	(f)	
0.5	0	0
1	2	2
1.5	2	3
2	2	4
2.5	1	2.5
3	1	3
3.5	0	0
4	0	0
4.5	0	0
5	0	0
	N = 8	14.5

Mean,  $\overline{X} = \frac{\sum fx}{N} = \frac{14.5}{8} = 1.8$ 

Mode = 3Median-2Mean [Median = 2] =  $3 \times 2 - 2 \times 1.8$ = 2.4

Shiva H. Secondary School Grammar in Context

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	0	0
1.5	1	1.5
2	1	2
2.5	1	2.5
3	1	3
3.5	3	10.5
4	1	4
4.5	0	0
5	0	0
	N = 8	23.5

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{23.5}{8} = 2.9$$

Mode = 3.5

### **Grammar in Isolation**

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	3	3
1.5	0	0
2	0	0
2.5	3	7.5
3	2	6
3.5	0	0
4	0	0
4.5	0	0
5	0	0
	N = 8	16.5

Mean, 
$$\overline{X} = \frac{\sum fx}{N} \frac{16.5}{8} = 2.06$$

Mode = 3Median-2Mean

[Median = 2.5] =  $3 \times 2.5 - 2 \times 2.06$ = 3.38

## Kopila Secondary School Grammar in Context

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	2	2
1.5	0	0
2	2	4
2.5	3	7.5
3	0	0
3.5	0	0
4	1	4
4.5	0	0
5	0	0
	N = 8	17.5

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{17.5}{8} = 2.18$$

Mode = 2.5

## **Grammar in Isolation**

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	3	1.5
1	0	0
1.5	3	4.5
2	2	4
2.5	0	0
3	0	0
3.5	0	0
4	0	0
4.5	0	0
5	0	0
	N = 8	10

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{10}{8} = 1.25$$

Mode = 3Median-2Mean

[Median = 1.5]  
= 
$$3 \times 1.5 - 2 \times 1.25$$

Nepal Rastriya Secondary School Grammar in Context

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	0	0
1.5	0	0
2	3	6
2.5	2	5
3	1	3
3.5	0	0
4	2	8
4.5	0	0
5	0	0
	N = 8	22

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	0	0
1.5	2	3
2	3	6
2.5	1	2.5
3	1	3
3.5	1	3.5
4	0	0
4.5	0	0
5	0	0
	N = 8	18

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{22}{8} = 2.75$$

Mode = 2

Mean,  $\overline{X} = \frac{\sum fx}{N} = \frac{18}{8} = 2.25$ 

Mode = 2

## Amar Jyoti H. Secondary School Grammar in Context

Si ummur m context		
Marks	No. of	fx
(x)	Students	
	(f)	
0.5	1	0.5
1	1	1
1.5	1	1.5
2	2	4
2.5	2	5
3	0	0
3.5	1	3.5
4	0	0
4.5	0	0
5	0	0
	N = 8	15.5

## **Grammar in Isolation**

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	1	0.5
1	2	2
1.5	3	4.5
2	0	0
2.5	1	2.5
3	1	3
3.5	0	0
4	0	0
4.5	0	0
5	0	0
	N = 8	12.5

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{15.5}{8} = 1.93$$

Mode = 3Median-2Mean

[Median = 2] =  $3 \times 2 - 2 \times 1.93$ = 2.14

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{12.5}{8} = 1.56$$

Mode 
$$= 1.5$$

Eager Bridge H. Secondary School Grammar in Context

		1
Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	0	0
1.5	0	0
2	2	4
2.5	0	0
3	2	6
3.5	3	10.5
4	0	0
4.5	1	4.5
5	0	0
	N = 8	25

**Grammar in Isolation** 

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	0	0
1.5	1	1.5
2	1	2
2.5	1	2.5
3	1	3
3.5	0	0
4	1	4
4.5	3	13.5
5	0	0
	N = 8	26.5

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{25}{8} = 3.12$$

Mode = 3.5

Mean,  $\overline{X} = \frac{\sum fx}{N} = \frac{26.5}{8} = 3.31$ 

Mode = 4.5

South Asian Scholar's Academy Grammar in Context

0		
Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	1	1
1.5	1	1.5
2	2	4
2.5	1	2.5
3	2	6
3.5	0	0
4	1	4
4.5	0	0
5	0	0
	N = 8	19

**Grammar in Isolation** 

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	0	0
1.5	0	0
2	5	10
2.5	2	5
3	1	3
3.5	0	0
4	0	0
4.5	0	0
5	0	0
	N = 8	18

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{19}{8} = 2.37$$

Mode = 3Median-2Mean

$$[Median = 2.5] = 3 \times 2.5 - 2 \times 2.37 = 2.76$$

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{18}{8} = 2.25$$

Mode = 2

## **Emmanuel Secondary School Grammar in Context**

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	1	1
1.5	1	1.5
2	3	6
2.5	0	0
3	1	3
3.5	2	7
4	0	0
4.5	0	0
5	0	0
	N = 8	18.5

## **Grammar in Isolation**

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	3	3
1.5	1	1.5
2	0	0
2.5	2	5
3	1	3
3.5	1	3.5
4	0	0
4.5	0	0
5	0	0
	N = 8	16

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{18.5}{8} = 2.31$$

Mode = 2

Mean,  $\overline{X} = \frac{\sum fx}{N} = \frac{16}{8} = 2$ 

Mode = 1

## Elite English Medium School Grammar in Context

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	0	0
1.5	0	0
2	0	0
2.5	1	2.5
3	1	3
3.5	3	10.5
4	1	4
4.5	2	9
5	0	0
	N = 8	29

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{29}{8} = 3.62$$

Mode = 3.5

## **Grammar in Context**

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	0	0
1.5	0	0
2	0	0
2.5	1	2.5
3	3	9
3.5	0	0
4	0	0
4.5	3	13.5
5	1	5
	N = 8	30

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{30}{8} = 3.75$$

Mode = 3Median-2Mean

[Median = 4.5]  
= 
$$3 \times 4.5 - 2 \times 3.75$$
  
= 6

## Surkhet Horizon Academy Grammar in Context

0		
Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	0	0
1.5	0	0
2	1	2
2.5	0	0
3	2	6
3.5	1	3.5
4	1	4
4.5	1	4.5
5	2	10
	N = 8	30

## **Grammar in Isolation**

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	0	0
1.5	0	0
2	0	0
2.5	0	0
3	0	0
3.5	1	3.5
4	2	8
4.5	3	13.5
5	2	10
	N = 8	35

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{30}{8} = 3.75$$

Mode = 3Median-2Mean

$$[Median = 4]$$
$$= 3 \times 4 - 2 \times 3.75$$
$$= 4.5$$

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{35}{8} = 4.37$$

Mode = 4.5

#### Adarsh Raj Memorial Secondary School .

Grammar in Context		
Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	0	0
1.5	0	0
2	0	0
2.5	0	0
3	3	9
3.5	3	10.5
4	1	4
4.5	1	4.5
5	0	0
	N = 8	28

C . -4 **C**,

# Mean, $\overline{X} = \frac{\sum fx}{N} = \frac{28}{8} = 3.5$

= 3Median-2Mean Mode [Median = 3.5]

$$= 3 \times 3.5 - 2 \times 3.5$$
$$= 3.5$$

#### **Grammar in Isolation**

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	0	0
1.5	0	0
2	0	0
2.5	1	2.5
3	0	0
3.5	2	7
4	3	12
4.5	2	9
5	0	0
	N = 8	30.5

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{30.5}{8} = 3.81$$

Mode = 4

# **APPENDIX** – VII Calculation of Mean and Mode of Public and Private Boarding School

#### **Public Schools**

Grammar in Context		
Marks	No. of	fx
(x)	Students	
	(f)	
0.5	1	0.5
1	4	4
1.5	4	6
2	14	28
2.5	12	30
3	4	12
3.5	5	17.5
4	4	16
4.5	0	0
5	0	0
	N = 48	114

Grammar in Isolation		
Marks	No. of	fx
(x)	Students	
	(f)	
0.5	5	2.5
1	9	9
1.5	11	16.5
2	10	20
2.5	7	17.5
3	5	15
3.5	1	3.5
4	0	0
4.5	0	0
5	0	0
	N = 48	84

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{114}{48} = 2.37$$

Mode = 2

Mean,  $\overline{X} = \frac{\sum fx}{N} = \frac{84}{48} = 1.75$ 

Mode 
$$= 1.5$$

# **Private Boarding Schools**

#### **Grammar in Context**

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	2	2
1.5	2	3
2	8	16
2.5	2	5
3	11	33
3.5	12	42
4	4	16
4.5	5	22.5
5	2	10
	N = 48	149.5

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{149.5}{48} = 3.11$$

Mode = 3.5

#### **Grammar in Isolation**

Marks	No. of	fx
(x)	Students	
	(f)	
0.5	0	0
1	3	3
1.5	2	3
2	6	12
2.5	7	17.5
3	6	18
3.5	4	14
4	6	24
4.5	11	49.5
5	3	15
	N = 48	156

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{156}{48} = 3.25$$

Mode 
$$= 4.5$$

# **APPENDIX** – VIII Total Calculation of Mean and Mode

# **Public and Private Boarding School**

Grammar in Context		
Marks	No. of	fx
(x)	Students	
	(f)	
0.5	1	0.5
1	6	6
1.5	6	9
2	22	44
2.5	14	35
3	15	45
3.5	17	59.5
4	8	32
4.5	5	22.5
5	2	10
	N = 96	263.5

Marks	No. of	fx	
(x)	Students		
	(f)		
0.5	5	2.5	
1	12	12	
1.5	13	19.5	
2	16	32	
2.5	14	35	
3	11	33	
3.5	5	17.5	
4	6	24	
4.5	11	49.5	
5	3	15	
	N = 96	240	

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{263.5}{96} = 2.74$$
  
Mode = 2

Mean, 
$$\overline{X} = \frac{\sum fx}{N} = \frac{240}{96} = 2.5$$

Mode 
$$= 2$$

# Calculation of Mean and Mode of Girls and Boys

## **Girls of Public Schools**

#### **Grammar in Context**

Marks	No. of	fx
(x)	Students (f)	
0.5	0	0
1	2	2
1.5	1	1.5
2	7	14
2.5	6	15
3	4	12
3.5	1	3.5
4	3	12
4.5	0	0
5	0	0
	N = 24	60

MarksNo. of  
Students (f)fx
$$(x)$$
Students (f) $0.5$  $0$  $1$  $4$ 

7

4

6 2

1

0

0

0

N = 24

10.5

8

15

6

3.5

0

0

0

47

1.5

2

2.5

3 3.5

4

4.5

5

**Grammar in Isolation** 

Mean 
$$(\overline{X}) = \frac{\sum fx}{N} = \frac{47}{24} = 1.9$$
  
Mode = 1.5

Mean ( $\overline{X}$ ) =  $\frac{\sum fx}{N} = \frac{60}{24} = 2.5$ Mode = 2

# **Boys of Public Schools**

Grammar	in Co	ntext
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Marks	No. of	fx
(x)	Students (f)	
0.5	1	0.5
1	2	2
1.5	3	4.5
2	7	14
2.5	6	15
3	0	0
3.5	4	14
4	1	4
4.5	0	0
5	0	0
	N = 24	54

Marks	No. of	fx
(x)	Students (f)	
0.5	5	2.5
1	5	5
1.5	4	6
2	6	12
2.5	1	2.5
3	3	9
3.5	0	0
4	0	0
4.5	0	0
5	0	0
	N = 24	37

Mean 
$$(\overline{X}) = \frac{\sum fx}{N} = \frac{54}{24} = 2.25$$
  
Mode = 2

Mean 
$$(\overline{X}) = \frac{\sum fx}{N} = \frac{37}{24} = 1.5$$
  
Mode = 2

# **Girls of Private Schools**

Grammar	in	Context

Marks	No. of	fx
(x)	Students (f)	
0.5	0	0
1	1	1
1.5	1	1.5
2	3	6
2.5	1	2.5
3	5	15
3.5	7	24.5
4	4	16
4.5	2	9
5	0	0
	N = 24	75.5

Marks	No. of	fx
(x)	Students (f)	
0.5	0	0
1	2	2
1.5	0	0
2	3	6
2.5	3	7.5
3	5	15
3.5	2	7
4	4	16
4.5	3	13.5
5	2	10
	N = 24	77

Mean 
$$(\overline{X}) = \frac{\sum fx}{N} = \frac{75.5}{24} = 3.14$$
  
Mode = 3.5

Mean 
$$(\overline{X}) = \frac{\sum fx}{N} = \frac{77}{24} = 3.2$$
  
Mode = 3

# **Boys of Private Schools**

Grammar in C	Context
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Marks	No. of	fx
(x)	Students (f)	
0.5	0	0
1	1	1
1.5	1	1.5
2	5	10
2.5	1	2.5
3	6	18
3.5	5	17.5
4	0	0
4.5	3	13.5
5	2	10
	N = 24	74

## **Grammar in Isolation**

Marks	No. of	fx
(x)	Students (f)	
0.5	0	0
1	1	1
1.5	2	3
2	3	6
2.5	4	10
3	1	3
3.5	2	7
4	2	8
4.5	8	36
5	1	5
	N = 24	79

Mean 
$$(\overline{X}) = \frac{\sum fx}{N} = \frac{74}{24} = 3.08$$
  
Mode = 3

Mean  $(\overline{X}) = \frac{\sum fx}{N} = \frac{79}{24} = 3.3$ Mode = 4.5

APPENDIX- IX Graphic Representation of the Difficulty Level Histograms of Different Tests School: Ananda Secondary



School: Jana Sewa Higher Secondary



























## School: Emmanuel Secondary





School: Elite English Medium Secondary





## School: Adarsh Raj Memorial



# APPENDIX - X



Isolation

Context