

THE ATTITUDES OF TEACHERS AND STUDENTS
TOWARDS USING PLASMA TELEVISION FOR
INSTRUCTION IN THE GENERALSECONDARY
SCHOOLS OF BAHIR DAR SPECIAL ZONE



BY

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ABSTRACT

The purpose of this study was to assess the attitudes of teachers and students towards using plasma television for instruction in the general secondary schools of Bahir Dar special zone. To realize the purpose of the study, the necessary data were secured from 66 teachers and 374 students using a descriptive survey approach.

A forty-six item attitude questionnaires (twenty-six for teacher respondents and twenty for student respondents) based upon the Likert Scale were administered. The data obtained through open-ended questionnaires, interviews (with school principals and zone education office head) and observations have been included in the analysis of data as pertinent information. Both qualitative and quantitative methods were employed. The data were tabulated, analyzed and interpreted using frequency percentages and chi-square.

The findings showed that in both teachers' and students' responses, there was no statistically significant attitudinal difference between the respondents favoring rating levels for using plasma television for instruction. The identified attitudinal difference in terms of sex and school variations of the respondents was found to be statistically non-significant.

Moreover, the findings showed that factors affecting the attitudes of respondents were centered around the mode of presentation of TV teachers and inadequacy of televised teaching learning facilities/aspects. It was thus suggested that factors affecting the respondents' attitude should be considered so as to facilitate televised teaching-learning process.

List of Abbreviations and Acronyms

EMA - Educational Media Agency

GSS – General Secondary School

ITV - Instructional Television

MOE- Ministry of Education

PTV - Plasma Television

CRT/s- Classroom Teacher/s

TVT/s- Television Teacher/s

TV – Television

CHAPTER I

1. The Problem and Its Approach

1.1 Background of the Study

One of the most reasonable ways to provide quality education is to prepare an educational setting well organized with educational facilities. Among others, the use of modern electronic media is essential for teaching-learning strategies, in order to improve its efficiency as well as effectiveness. That is, for the betterment of educational quality of a given nation, in addition to effective teacher training, and provision of facilities the importance of appropriate technology in teaching learning process is highly significant.

From this point of view, currently the Education and Training Policy of Ethiopia clearly stated that the system has to use educational technology in order to promote the quality, relevance and expansion of education.

As one of the strategies to improve educational quality, the Government of Ethiopia has launched a new plasma television program for educational purpose in most of the general secondary schools of the country since 2004/5. In fact, different scholars have indicated that teaching through instructional television (ITV) has the upper hand over other media. For example, Newson (1952:58) has indicated that it is generally agreed that television because of the sight and sound aspects and because of one's attention is devoted more fully to television than radio – has a greater impact on the viewer and listener than radio has on its listener.

Moreover, the importance of learning through instructional television (ITV) has been justified by Schramm, Lyle and Pool (1963:165) in their finding as follows:

The number of school children and college students receiving part of their teaching by instructional television (ITV) has risen exponentially in the last five years. In the last year, too, great progress has been made in understanding the strengths and weaknesses of teaching by television. It has been learned that the medium has a great power to attract and hold attention and interest, that it has an unequalled ability to share good teaching and excellent demonstrations.

This is an indication that due attention has been given for the instructional television (ITV) in the teaching learning process. (Note: In this study the expressions/phrases “instructional television” and “plasma television” are used interchangeably.)

One of television’s major advantages is its capability of overtly and explicitly showing a process transformation. Many other media present transformations, but TV – alone can visually show a transformation which is analogous, or even similar, to what ought to take place in our minds (Ackerman and Lipsitz, 1977:55).

In spite of its role in the teaching learning process, instructional television (ITV) has faced a problem of resistance from the utilizers due to some limitations. Murphy and Gross (1975:6) in their research indicated that there are two prime causes for instructional television’s limited acceptance, i.e, the quality of transmitted instruction and the way it is used in the classroom. According to these authors, television has not transferred education, nor has it significantly improved the learning of most students. They claim that television is still far from fulfilling its obvious promise (Murphy and Gross, 1975:9).

Out of such criticism of instructional television, emerges the question of teachers and students’ attitudes towards using instructional television. The attitudes of teachers and students towards using ITV is crucial in realizing the objectives of instructional television which in effect requires critical investigation.

As indicated by Breer and Locke (1965:8), individuals obviously vary in what they prefer, believe and value. There are many reasons for this. A complete explanation would presumably include references to family socialization, peer group influence, specific events in the individual’s past, sources of anxiety, basic strivings, mechanisms of defense, aptitudes and skills, education, income, occupation, and the mass media. Of course, attitudes will be modified through learning in accordance with one’s own goals and drives (Remmers; 1954:5).

Some critics also suggest that many of negative attitudes towards instructional television are not always based on rational evaluations with a maximum of knowledge but rather are emotional responses to a contrived image vaguely perceived as a threat (Evans, 1967:35).

Usually evaluations or appraisals related to the individual’s attitude on an issue, certain items represent acceptable positions while other are objectionable. Together the acceptable and objectionable positions from the individual’s reference scale are used for judging specific statements, objectives, and events on the issue (Sherif and Nebergall, 1965:7).

In this study the attitudes of teachers and students towards using instructional television is considered. Their evaluative judgment of the various aspects of ITV in the form of favorableness and unfavorableness are also investigated.

For this study evidence is available that the Educational media Agency (EMA) has launched a new plasma television program for educational purpose in most of the Ethiopian General Secondary and preparatory schools under the auspices of Ministry of Education (MOE) since 1997 (E.C.) with the objectives of:

- Conveying similar educational access and standards for all schools;
- Helping students to observe laboratory experiments from screen, and
- Conveying quality educational standards in secondary schools.

In general secondary schools, the program is being broadcasted in six subjects: English, Mathematics, Physics, Chemistry, Biology and Civic and Ethical education. As far as the number of broadcast programs are concerned it varies from subject to subject. There are 582 programs in English, 632 in Mathematics, 458 in Physics, 458 in Chemistry, 458 in Biology, and 392 in Civic and Ethical education (EMA, 2004).

Nowadays, plasma TV for instructional purpose in the secondary schools of our country is being utilized. In Bahir Dar special Zone, the area which the student researcher is familiar with, also this new technology is being implemented as in other parts of the country's secondary schools.

Based on the indications that the implementation of plasma TV program in the general secondary schools of Bahir Dar special Zone was resisted by teachers and students, the study has attempted to investigate their attitudes.

To the knowledge of the researcher there has been no research, with reference to the secondary schools of Bahir Dar special zone, conducted on the same issue. Therefore, this study was initiated to assess the attitude of teachers and students towards using plasma TV for instructional purposes in the secondary schools of the selected zone. Eventually, based on the findings of the study the attempt is made to recommend possible solutions for the problem at hand.

1.2 Statement of the Problem

The purpose of this study was the identification of the attitudes of teachers and students as perceived by themselves, towards using plasma television for instructional purposes in the general secondary schools of Bahir Dar Special Zone.

In view of improving the educational quality, Ministry of Education has launched the use of electronic media and technology through what is called plasma television for the purpose of educational transformation for general secondary and preparatory schools (Grades 9-12) of the country. It is agreed that learning from TV as compared to conventional learning is so much more vivid that it is more easily retained and recalled (Gattegno, 1969:38).

As pointed out in the introductory part of this study, the implementation of plasma TV in the general secondary schools of Bahir Dar special zone is being resisted by the teachers and students of the schools.

Therefore, having this in mind, this study has been initiated to identify the direction of the attitudes of teachers and students towards using plasma TV for the instructional purposes in the general secondary schools of Bahir Dar special zone

1.3 Objectives of the Study

1.3.1 General Objectives

The overall objective of this study is to disclose the attitudinal direction of teachers and students towards using plasma TV for instructional purposes in the general secondary schools of Bahir Dar special zone and to suggest feasible recommendations based on findings of the study.

1.3.2 Specific objectives

The specific objectives of this study were the following:

1. To identify the attitude of teachers towards using instructional television.
2. To identify the attitude of students towards using instructional television.
3. To identify whether or not there is a significant difference in attitude towards using ITV between male and female teachers.
4. To identify whether or not there is a significant difference in attitude towards using ITV between male and female students.

5. To identify whether or not there is a significant attitudinal difference of teachers towards using ITV from school to school.
6. To identify whether or not there is a significant attitudinal difference of students towards using ITV from school to school.

To attain these objectives the study has attempted to give responses to the following basic (research) questions:

1. What is the Teachers' attitude towards using instructional TV?
2. What is the students' attitude towards using instructional TV?
3. Is there significant attitudinal difference towards using instructional TV between male and female teachers?
4. Is there significant attitudinal difference towards using instructional TV between male and female students?
5. Is there significant attitudinal difference of teachers towards using ITV school to school?
6. Is there significant attitudinal difference of students towards using ITV school to school?

1.4 Research Methodology

1.4.1 The Method

The subjects of this study were 2006/07 academic year grade ten televised lesson teachers and students of the general secondary schools of Bahir Dar special zone.

The study is designed to focus on the attitude of teachers and students toward using plasma TV for instructional purposes. Thus, the study has employed descriptive survey research method in order to answer research question raised in the study to disclose the attitudinal direction of teachers and students towards using plasma TV for instructional purposes in the general secondary schools of Bahir Dar special zone.

1.4.2 Sources of Data

The data for this study have been drawn mainly from primary sources. As secondary sources, reviewing of the available related literature has also been utilized since it gives the background information on the events and helps to find out what has so far been written and experienced in the research area. The reviews made are helpful in deriving and developing the research questionnaire and a guide for the interview.

The major sources of primary data were:

- a) Grade ten sampled students of Bahir Dar special zone general secondary schools.
- b) Grade ten televised lesson teachers of Bahir Dar special zone general secondary schools.
- c) The principals of Bahir Dar special zone general secondary schools.
- d) Zonal education head of Bahir Dar special zone.

1.4.3 Tools of Data Collection

The major instrument employed in order to gather the necessary data for this study has been questionnaire (both open and close ended). The questionnaire is taken to be major instrument because of its convenience to get data from large number of respondents.

To collect the relevant data according to the respondents' roles, two sets of questionnaires were used: one set for student subjects and the second set for teacher subjects. These two sets of questionnaires have included both open and close ended question items. Checklist has been another complementary technique that was employed during the study. Finally interviews were made with school principals and zonal education head. Employing multiple data collection method helped the researcher to combine the strength of the methods and to fill the inadequacy of single source of data.

1.4.4 Sample and Sampling Techniques

There are four general secondary schools in Bahir Dar special zone. These are:

1. Bahir Dar catholic general secondary school (Private)
2. Fasilo general secondary school.
3. Ghion general secondary school.
4. Tana Haik general secondary school.

All the governmental general secondary schools of the zone (Fasilo, Ghion, and Tana Haik) were included in the study, with the exception of Bahir Dar Catholic private general secondary school. The teaching learning process in Bahir Dar private Catholic general secondary school at present is proceeding in the conventional way (non-televised). Moreover, the researcher's assumption is that, teachers' and students' attitudinal research of private schools should be treated independently, and because of this the researcher didn't include it.

The study sample was taken from grade ten out of the two grade levels of the general secondary schools. This was so, because these students may have more experience than grade nine students of learning from plasma television.

With regard to the sampling techniques, the selection of grade ten student subjects from each secondary school has taken place by using simple random sampling and systematic sampling according to their respective proportion in the schools. The reason for selection of such criteria (simple random sampling and systematic sampling) is because of students' high number and at the same time to incorporate proportional number of respondents depending upon the population size of students in each school.

The selection of grade ten teacher respondents from each secondary school has been employed by using purposeful sampling. In this research teachers of non-televised lessons (subjects), such as Amharic, Geography, History and Physical education were not included. From grade ten teacher respondents of televised lessons all the teachers were include by using available sampling technique from each subject area of each school, so as to increase reliability of the data since the number of respondents was fairly manageable.

With regard to secondary school principals and zonal education head interviews were made with all of them because they are not high in number.

As far as sample size is concerned, the total number of teachers population was 75 of which, in fact, 66 respondents were properly filled in and returned the questionnaire. From the total population size of 3684 students, the sample size of the student respondents was 440. This student respondents' number was apportioned according to their respective proportion in the sample schools and 374 students have properly filled in and returned the questionnaire. Interview was conducted with one zonal education head and three general secondary school principals.

1.4.5 Method of Data Analysis

The data collected through close-ended questionnaire has been presented in tables and analyzed using percentage. At the same time, the data obtained through open-ended questionnaire, interview and observation has been included in the analysis of data as pertinent information.

In general, different statistical techniques have been employed in the analysis of data. Some of statistical tools which were employed include: Mean, percentage, and chi-square. In sum, Comprehensive tasks in tabulation, organization, analysis, and interpretation of collected raw data have been employed in the study.

The variations of the responses in tables are shown by using the five point scales (strongly agree, agree, undecided, disagree, and strongly disagree). But for the sake of convenience, in the process of

analysis, responses of strongly agree and agree in one group, disagree and strongly disagree in other group, and undecided still in another group were categorized and analyzed. This was deliberately done to show the variations of the responses in terms of favorable, undecided, and unfavorable attitude towards using PTV for instruction. To be selective and economical the same tables were commonly employed/used for different respondents groups (teachers and students). But the analysis was made separately. Of course comparison was made where and when needed.

1.4.6 Procedures of the Study

After the endorsement of the title and approval of the proposal by the Department of Educational Planning and Management, data collection instruments were developed by the researcher based on reviewing related literatures.

Likert Scale of summated rating was used in the present study of the attitudes of teachers and students towards using PTV for instruction in the general secondary schools of Bahir Dar special zone. Because Likert Scale is popular and assumed to be appropriate method to investigate such attitudinal issues, it gives respondents' an opportunity of a wide range of choices (usually not less than five) and its relative simplicity also made it preferable. A total of sixty Likert Scaled type items (thirty for teacher and another thirty for student respondents) were developed. Moreover, open-ended questions and unstructured interviews were developed and employed.

After the items have been assembled, items to be responded by the students were translated into Amharic in order to help them fill with ease and the screening and validation of the items took place through various methods. These methods were expert judgment and pilot test tryout. A group consisted of two post graduate students: one from the Department of Foreign Language and Literature and another one from the Department of Educational Psychology, in the area of measurement and evaluation. The tasks of this group were to comment and improve upon the clarity, wording, and appropriateness of the items as measures of attitudes.

Based on the assessment made by the group and comments of the advisor of the study, among sixty items fifty items (28 for teacher respondents and 22 for student respondents) were retained for pilot test . The pilot test was conducted on randomly selected grade ten televised lesson twenty teachers and forty students of Enjibara governmental general secondary school. Enjibara is the town, on the way to Bahir Dar, which was work place of the researcher prior to join for M.A program.

The pilot test respondents were oriented by the researcher about the purpose of the study and how to follow the instruction, to respond on the questionnaire. The reliability coefficients of questionnaires were 0.72 and 0.68 for teachers and students respectively. Based on the pilot test tryout feedback, four items that seem repeated were discarded and a total of forty six items (26 for teachers and 20 for students) has been administered.

The administration of the research instruments was held by the researcher, in fact, with the cooperation of respective school principals.

Interviews and class observations were also made to strengthen the reliability of the data. The principals of sampled schools (three) and the zone education head were interviewed based on the unstructured interview questions, focused on the implementation of plasma Television program to the teaching learning process.

1.5 Significance of the Study

Teachers' and students' appropriate attitudes towards using plasma TV for the instructional purposes are paramount importance to facilitate the teaching learning process. The identification of attitude of this sort provides a fertile ground in generating intervention.

As pointed out by Bridge (1979:235) to the makers of public policy, the ultimate purpose of input-output research should be to inform them of the appropriate "buttons to push' and "levers to pull' for bringing about higher achievement outcomes in the educational system. Thus, an investigation of the teachers' and students' attitude towards using plasma TV for instructional purposes in the secondary schools help to uncover deficiencies which, in turn, render teaching learning process move forward to address the aspirations of our changing societies. The findings of the study , therefore, may help:

1. concerned authorities to improve instructional TV programs, i.e. findings may indicate areas which may require remedies,
2. teachers and students be informed of the teaching quality involved in ITV,
3. to devise strategies by which teachers and students develop favorable attitude towards using plasma TV for instructional purposes;
4. for further research in the related area and on issue itself

1.6 Delimitations of the Study

The study has been delimited to investigate the attitude of teachers and students towards using plasma TV for instructional purposes in the secondary schools of Bahir Dar special zone. In other words, the sample schools are confined to Bahir Dar special zone due to manageability of data gathering. Moreover, the study has been delimited to the governmental secondary school of Bahir Dar special zone because non-governmental secondary school of the zone are not televised. In fact, all the governmental general secondary schools of the zone has been included in the study.

1.7 Limitations of the Study

The researcher believes that the present study is limited in the following aspects. Availability of related literature, specially local reference materials, on the attitude of teachers and students towards using instructional TV has been very scanty to provide the ground for the research. Secondly, lack of willingness of some respondents, to cooperate in filling and returning the questionnaire, has been one of the limitations that the study has encountered.

1.8 Definition of terms

The following terms are used throughout this study as operationally defined hereunder.

Attitude-In the Dictionary of Education, [Attitude] refers to the predisposition or tendency to react specifically towards an object, situation or value: usually accompanied by feelings and emotions. In this study "Attitude" refers to the respondents' reaction in favoring or disfavoring towards using plasma TV for instruction.

Plasma Television- Refers to newly incorporated instructional television for the educational purposes.

Special zone-In this study the "Special zone" refers to Bahir Dar town administration.

1.9 Organization of the Study

This thesis contains four chapters. Chapter one deals with the problem and its approach. The review of related literature comes in chapter two. Then, the third chapter deals with analysis and interpretation of data. The fourth chapter presents summary conclusions, and recommendations. Finally, lists of reference materials used for the study and papers containing important information are annexed in the appendices.

CHAPTER II

2. Review of the Related Literature

2.1. Introduction

This chapter of the report of the study deals with the organization and presentation of research findings, theories, assumptions, criticisms and other works of authorities pertinent to the attitudes of teachers and students towards using plasma TV for instruction in the secondary schools.

Thus, the organization of the chapter is based upon the following areas as the major topics: change and innovation in education, media in education, some issues on attitude and learning, training and attitudinal change, limitations of language on learning through media, expected roles of televised lesson classroom teachers and students, and support materials.

2.2. Change and Innovation in Education

Change and innovation in education requires the active participation of teachers, students, educators and all other concerned bodies without whom educational change and innovation can not be implemented. Not all innovations, of course, require full acceptance or complete rejection (Evans, 1967:17). Educational innovations to be transformed into actions teachers and students must have positive attitude towards these changes. As Zaudneh (1994) pointed out people's attitude determines their actions and to change one's action one has to change one's attitude.

Educational systems could be confronted with different types of resistances. One of these barriers is teachers' and students' attitudes or behavior towards the development of educational change and innovation. That is, the negative feelings, thinking and acting of teachers towards change. Of course, in order to survive and cope up with the existing situations, educational systems have to be dynamic.

The dynamism of educational system (Change and innovation) could be resisted by teachers and students due to various cases. In this regard Zaudneh (1994) indicated that people differ not only in the importance they assign to work but also in the manner they are treated. People's satisfaction to their work promotes in them an attitude to be change oriented. Heinich et.al, (1996:352-353) also stated the following on the perception of people (teachers) toward technology:

People within the same organization vary in their perceptions of new technology according to how it will affect what they do. For example, the introduction of the overhead projector was accepted and usually welcomed by teachers because it was viewed as more versatile chalkboard, fit easily into their established practice, and reinforced their status in the classroom. But if a principal joins a plasma network because she wants her school to benefit from the coursework offered, her staff may perceive the technologically delivered courses as an affront or a challenge to their professional status. Whole courses delivered technologically could easily be perceived as replacing teachers, thus threatening their job security.

Some people may not resist change itself. What they are resisting is the side effects behind the change. The fear of the result of change, assuming that it will harm them. People may resist change if it is not their need or problem and it is not well understood by them. In this case, what people resist is not change but loss or the possibility of loss.

Therefore, it is expected of a concerned leader to create an acceptable working environment or conducive working conditions in order for the work group to obtain job satisfaction and to be ready for the acceptance of change and innovation. The absence of an acceptable working environment and lack of job satisfaction lead to lower moral and develop resistance to change (Zaudneh, 1994).

Education is one of the social phenomenon that it is crucial in the development and progress of society at large. It needs change and innovation in itself to cope-up with growing social development and to fulfill the demands of the contemporary society. As indicated by Hooper (1971:151) in the traditional classroom the teacher is the fountain of wisdom, from whom with the exception of the textbooks-all formal instruction comes. With the rapid expansion of new knowledge in many areas of the curriculum, this exclusivity of the teacher is no longer desirable nor actually possible. According to Hooper (1971) no teacher can be expected to keep up-to-date with all current developments in his/her own field. With the task of information transmission shared by other media-including, of course, books-the quality and topicality of information being communicated in the learning situation will be radically improved.

Aggravated by shortage of qualified teachers and insufficient instructional materials for most of developing countries, providing access and quality of education through the use of traditional methods is beyond the scope of foreseeable resources.

Ethiopia as the developing country needs to accelerate changes in social, political and economic life of the society. These changes are, therefore, possible when there are changes in the

educational system. By now the country is moving towards newer educational activities based on the knowledge that has been developed in the world in the past several years. The country has also determined to use educational technology to improve the educational quality and quantity in teaching-learning process. Demand for education especially in developing countries, is constantly outstripping the national resources to supply it. The crunch point has been reached and it is becoming clear that education can not proceed along traditional lines (Hooper, 1971:154). This is, in fact, difficult without the change of teachers and students' attitudes through orientation, training, workshop, seminar and fulfilling other necessary materials to enhance their moral and intellectual need that are to satisfy their social and professional lives. As indicated by Evans (1967:2) the speed of acceptance of innovation appears to depend not only on the innovation itself but on many other factors, including the nature of the social system and the character of its members.

Teachers and students may have negative attitudes towards the development of change and innovation in education if they lack knowledge about the innovation and necessary materials, and if they are dissatisfied with their work due to lack of financial, material and non-material incentives and orientations. Leigh (1988:70) stated that some resistance to innovation is active and others are passive. Innovation is the promotion of new ideas and practices in education, in teaching used with the reference to curriculum, syllabus and to educational administration. Change is the inclusive term for innovation. But all changes can not necessary be innovations. Also we cannot expect that innovations will happen without changes.

2.2.1 Some of the Characteristics of Innovations

Some of the characteristics of innovations as perceived by individuals to explain their different rate of adoption as stated by Rogers (1983: 15-16) are:

- A. **Relative advantage:** The degree of relative advantage may be measured in economic terms but social prestige factors, convenience and satisfaction are also important components. It doesn't matter so much whether an innovation has great deal of objective advantages. What does matter is whether an individual perceives the innovation as advantageous. The greater the perceived relative advantage of an innovation, the more rapid its rate of adoption is going to be.
- B. **Compatibility:** It is the degree to which an innovation is perceived as being consistent with existing values, past experiences and needs of potential adopters. An idea that is not

compatible with prevalent values and norms of a social system will not be adopted as rapidly as an innovation that is compatible.

- C. **Complexity:** it is the degree to which an innovation is perceived as difficult to understand and use. Some innovations are easily understood and applied by most members of a social system; others are more complicated and will be adopted more slowly. In general, new ideas that are simpler to understand will be adopted more rapidly than innovations that require the adopter to develop new skills and understanding.
- D. **Trialability:** it is the degree to which an innovation may be experimented within a limited basis. New ideas that can be tried on the pilot test and have shown good result will generally be adopted more quickly than innovations that are not visible. If an innovation could not be sampled experimentally, its rate of adoption could be much slower. An innovation that is trialable represents less uncertainty to the individual who is considering it for adoption, as it is possible to learn by doing.
- E. **Observability:** it is a degree to which the results of innovation are visible to others. This implies that innovations that are perceived by people as having greater relative advantage, compatibility, trialability, Observability and less complexity will be adopted more rapidly than other innovations.

In general, the characteristics of innovations as perceived by individuals can have an impact on the attitudes of individuals for the adoption of innovations. Change in attitude is just as necessary as change in production (Bishop, 1986:6). From this point of view, we can realize that change in teachers' and students' attitude toward education technology (in this case instructional television) is very important for effective adoption of change and innovation in education.

2.2.2 Some of Barriers to Educational Innovations

According to Havelock and Haberman (1977:32) innovation or change that comes from outside the motive or interest or willingness of the users will not easily be accepted and applied. It will face resistance from the practitioners. According to the explanations of Zaudneh (1994) some of the barriers to educational innovations are:

- √ **Lack of enthusiasm:** educational innovators are not usually given recognition and praise. It is often possible for the mediocre to be rewarded while competent is omitted.
- √ **Lack of reward for innovating:** those adopting changes are perhaps, paid the same as those rejecting or discarding it.
- √ **Lack of willingness to initiate change:** teachers seldom suggest new working patterns for themselves. The teachers generally have no innovative character. They are less competitive than professionals in other disciplines. According to research study, teachers are often passive and reluctant to initiate change.
- √ **Conservative way of thinking:** conservatism in education is also furthered by simple inertia. Once things have been done in a certain way for a generation or two, people become reluctant to upset established tradition.

According to Chapman and Mahlck (2004:43), schools are conservative organizations and their incentive structures are hard to change. Very often, they welcome small experiments that do not threaten conventional operations.

Education in itself should enable the learner to live in a changing world. To show what change is to man in relation to education, Kent (1969:106) pointed out that no man born to day will die in the same world, as more and more advances are made in educational technology. This indicates that advances in educational technology are driving forces of all rounded progresses. In fact teachers must take advantages of educational technology if education is going to keep pace with developments in other fields. Therefore, what is taken as a remedy to overcome the problems that arise from rapidly changing way of life, and highly demanding social need is the application of technological products for education as a means of instructional media. That is why instructional materials have passed through various stages of development from chalkboard to the present computer and teaching machine level corresponding to the technological advancement. It is clear, of course, that the level of technological development and availability of resource determines the introduction of this new and sophisticated materials in the schools of developing countries.

2.3. Media in Education

Educational Media has an important role to play in furthering education and development. The role is more significant in the context of situations existing in developing societies which are faced on the one hand, with the problem of huge percentage of illiteracy and heavy dropout rates, on the other hand with the emergent need to provide greatly increased access to education in formal and non-formal systems (Mohanty, 1984: 1).

Modern educators recognize instructional media as revealing the values concreteness, enriching and creating dynamic interest in the learners. As stated by Sharma (1994:250) instructional media is very essential to: access processes, materials, events and things, study things, changes in time, speed and space, provide integrated experiences varying from abstract to the concrete and they bring experts and multiple resources to the classroom. Besides it is valuable to all age groups it helps us to illustrate and clarify, non-verbal symbols and images, quantitative relationship, complex and abstract relationships temporal and special relations and specific details.

According to Murphy and Gross (1975:35), while assessing the benefits and disadvantages of any instructional delivering tool, we have to bear in mind that, a tool must be evaluated not against an absolute standard of efficiency but against the efficiency of alternative tools that are available.

Though instructional media have contributed for the development of education, researchers argue on how to choose the best one. Schramm (1977:59-60) explained it as, there is no single medium which is likely to have properties that makes it best for all purposes, sometimes one media is found by the research to have an advantage for one subject only to be shown to have none for another subject. In addition, he stated that, personality also may matter; some people may be "visual minded" and therefore learn readily from visual presentations, while others may be "auditory minded" and therefore learn more from auditory presentations.

Some others state that, among other audio visual instructional media, television is most effective in the perceptual phases of learning, in providing sensory experiences, pointing up significant cues and more broadly orienting the student, informing him perhaps inspiring his/her learning further. Despite the use of instructional media in facilitating and delivering education, the quality of the transmitted instruction and the way it is used in the classroom so far limits its wide acceptance and also reveals its shortcomings (Murphy and Gross, 1975:6).

Some of the disadvantages of instructional television are: there is no feedback to the lecturer or demonstrator to tell him/her how he/she is doing, it provides no opportunity for discussion and expression of students' opinion until after the show is over and it gives no way to vary the flow of discourse for the benefit of student differences. In addition, it is a viewing and listening device only while it is going on, no further action is possible. The instructor instructs at his/her own rate and there is no possibility of adopting instruction to individual differences among the viewers in intelligence and background. In general, educational television is less effective when the feedback response is important and when discussion and give and take between students and the instructor are needed (B.M. Sharam, 1994: 61-64).

On the other hand the chief advantages of educational television include: it can carry instruction to different classrooms where it might not otherwise be provided, it can provide superior lecture demonstrations for extensive curricular content and it makes possible close-up views of what is being demonstrated and of on-going events for class observation, beyond this it has the advantage of all audio-visual instruction that of enhancing perceptual instruction. It could also improve the quality of education with no increase in cost once installed (Murphy and Gross, 1975: 37).

Currently, plasma television is being used in developed and developing nations as a means to deliver instruction. As Petros (1996 E.C) quoted from the World Bank Human Power Development report for African Region: 2002, Mexico, Brazil, India and Indonesia are countries of developing nations prior in implementing plasma television for educational instruction.

Ethiopia is one of the countries which has taken a step in the implementation of information communication technology to strengthen the expansion of quality education. As stated by Demissew (1991) media technology has been to practice for the first time in Ethiopia in 1961 by an agreement entitled Point Four with USAID. Broadening its area of coverage, television in 1965 and educational radio transmissions were launched for limited grades and subjects in 1970. It has served schools around the capital city and to places in Arsi and Shoa Administrative Regions (Demissew ,1991: 28).

According to the previous assessments made on the introductions of the above modern technologies, it was found out that though media technology has contributed a lot for the development of modern education in Ethiopia, it had its own shortcomings such as technical problems, electric power shortage, lack of follow-ups and assessments, transmission errors resulting from the geographic location of the area, time shortage etc. (Petros, 2002:63).

Because of its significant contributions to bring about qualitative and quantitative improvements of education, the roles and expectations of the use of media have broadened considerably from time to time. Learners, teachers and curricular materials are the three factors that determine the use of media in education (Knirk and Gustfson, 1986). That is to say, learners' needs, learning environment, and teachers abilities as crucial factors that determine the use of instructional technology in education.

Basically when media are used for the purpose of instruction, they tend to take the students from a state of not knowing to one of knowing (Locatis and Atkinson, 1984:13). In this regard educators such as Clark and Starr (1988:400); Heinich et.al, (1989:5) remarked that educational media as a decisive factor for effective and durable learning. Educational media is being seen as great assistance where the educational system has some particular deficiencies, such as shortage of qualified teachers, lack of textbooks and other educational facilities. Accordingly educational media broadcasts are nationally prepared to support the classroom teachers, to enhance the teaching-learning process and to be used as a learning resource in order to overcome deficiencies of the educational system.

Media can serve many roles in instruction. The instruction may be dependent on the presence of a teacher (i.e. instructor-directed). Even in this situation, media may be heavily used by the teacher. On the other hand, the instruction may not require a teacher. Such student-directed instruction often called "Self-instruction" even though it is guided by whoever designed the media (Heinich et. al., 1996:19).

Gattengo (1969) Classified these patterns as follows:

- √ **Total television teaching:** the television teacher carries the total teaching responsibility. Programs may be received in small or large classes in which the classroom teacher is no more than a supervisor.
- √ **Supplemented television teaching:** the classroom teacher supplements the presentation of the television teacher in the preparation and follows up the lesson.
- √ **Television supplementing classroom:** The student receives his/her teaching-learning primarily from the classroom teacher, while television programs are received at less frequent intervals and present materials, which add to the classroom lesson.

- √ **Television as a teaching aid:** the classroom teacher is in complete control and uses of TV for demonstration, observation and magnification as a tool which he manipulated with his own hands.

Education with its correlated activities of teaching and learning involves communicative interaction between the teacher and students; the teacher and media and the students and media. Due to these facts there exist inseparable connection between education and media. After reviewing a number of studies, Amare (1999) strongly argues that no teaching-learning activity takes place without media. From this point of discussion it is clear that media involve remarkable and meaningful contribution to the process of education.

Hence, media should be considered as an indispensable part in the process of education. In its wider sense the term, media refers to the physical means by which messages can be transmitted or delivered from a source to a receiver or vice-versa. (Locatis and Atkinson, 1984:3; Gagne et.al., 1992:208; Amare, 1999:53).

In the professionals literatures, educational media have different names such as:

- Educational technology (Sampath et. al, 1984:1; Lockheed and Middleton, 1992:2),
- Instructional technology (Wittich and Schuller, 1979:5; Brown et.al., 1985:158; Knirk and Gustafson, 1986:2),
- Instructional media (Heincih et. al., 1989:5; Gagne et.al, 1992:208; Alemeyehu, 1997:3; Seels and Glasgow, 1998:5),
- Audio-visual materials (Dale, 1969:1; Davies, 1981: 273; Clark and Starr, 1988:400; Callahan and Clark, 1986:240).

Regardless of using various names, the term educational media is used to represent all of the various physical means by which an instructional message is communicated (Reiser and Gagne, 1983:5). According to this definition a printed text, an audiotape, an instructional radio program, a training device, a TV program, a teacher's talking along with many other physical means, are all considered educational media.

2.3.1 Some of the Pedagogical Values and Utilization of Educational Media.

It is difficult to undermine the role that media could play in the process of instruction. The teacher's role in the learning process is changing as new technologies are introduced into the classroom. As stated by Heimlich et.al, (1996:353) teachers are not being replaced by technology, but their role has changed from that of presenter of information to that of coordinator of learning resources. In addition, they serve as facilitator, manager, counselor, and motivator. Their new role frees them to work more independently with individuals, and small groups while leaving the formal presentations to another medium. And different scholars described the importance of media in different ways. But what is important is how media are used and what they contribute to the process of instruction. Educational media are used to simplify instruction because they should not make the process complex (Davies, 1981:132). Educational media are used in compiling and retraining students' attention (Heinich et.al, 1989:5). They add variety to the learning process including greater attention and understanding (Brown, 1985:11).

As stated by Dale (1969) some of the pedagogical values of educational media are as follows:

- √ Encourage students' active participation in the process of instruction thereby helping students in skill development.
- √ Encourage creative thinking. Because educational media play a significant role to practical learning through active and practical involvement in various activities such as problem solving, experiments, assignments, which are necessary to facilitate learning through doing.
- √ Break away the physical limits of time and space. Events that are out of reach, out of sight and out of mind can come to classroom with the help of educational media through concrete representations, a case that asserts the power of educational media to bring almost everything to the classroom.
- √ Encourage individualized learning and allow greater flexibility in to the process of instruction. Educational media are helpful in carrying out diagnostic and remedial works required to overcome learning difficulties of students and improve the teaching learning conditions.
- √ Overcome different barriers to learning that may originate during the instructional process and provide clarity in the lesson and facilitate students' undersigning.

- √ Upgrade the instructional role of the teacher. They (instructional media) help the teacher to cease being mere dispenser of information and consequently raises his/her role to the level whereby he/she can organize circumstances that provide the best opportunity for learning. In other words, he/she (classroom teacher) can take less time for talking and more time for planning and guiding students activities and evaluation of the instructional program. In short, educational media are necessary to make teachers effective classroom leaders and managers of instructional activities.

As indicated by Chapman and Mahlck, (2004:19) if education systems are to reap a meaningful return on their investment, educators will need to better understand the key issues and formulate more sensible strategies for integrating technology in classroom instruction. Of course, educational media should not be determined in any case as cure-all tools in education. Rather, they should be considered as important instruments to overcome most of the problems of instruction. Chapman and Mahlck (2004) further explained that many of the obstacles to effective instruction to be overcome through selection and utilization of appropriate educational media.

Broadcasts such as radio and television are some of the tools that are used in solving an educational problems, part of the technology of an educational system (Gough, 1982:213). Broadcasts have been used for a wide variety of purposes. Because plenty of intellectual skills have been successfully taught by broadcasts such as radio and television when provisions are made for students` response (Bates, 1984:12; Gagne et.al, 1992:209).

The purpose of using any instructional materials which includes instructional TV, is to improve instruction. The improvement of instruction inturn brings about rapid and desired changes of behavior in learners. The desired change of behavior is likely to happen efficiently and effectively when appropriate audio-visual materials are available and used.

Audio-visual materials are many and diverse, which include chalkboard, charts, radio, films, television, teaching machines, computers, real objects, etc. Each of these, however, has its own specific significances and limitations. In spite of the limitations each has, audio-visual materials generally facilitate learning in the following ways (Nishida, 1971: 18-19).

- √ Audio-Visual materials serve to stimulate pupils to study and make their leaning activities positive. They are realistic, arouse pupils` interest in study and promote their desire to lean.
- √ Audio-Visual materials provide pupils with common experience i.e. pupils vary in experience and can grasp differently and this difference can be narrowed if they are exposed to the same

audio-Visual materials. Such gaps can be reduced between students of different schools taught by different teachers.

In this regard Chapman and Mahlck (2004:23). Pointed out that lessons developed in one location can be broadcast via radio or television or made available through e-mail or the World Wide Web for use by students (individually or in groups) in other locations. Excellent teaching can be made widely available. This is especially important in countries in which large segments of the teaching force are under-qualified for the grades they are expected to teach.

Difference in teachers and facilities is greater between remote and urban schools than the inequality of schools within the same area or Zone. The remote schools have poor access to educational authorities, experts, and facilities for the provision of quality education. Therefore, the implementation of instructional television for the purpose of improving quality of education and for the purpose what Nishida (1971) indicated above, particularly to narrow the gaps between relatively well-equipped urban schools and remote-rural secondary schools of developing countries like Ethiopia is paramount importance.

Regardless of all the benefits audio-visual materials provide, there is a traditional tendency that the use of audio-visual materials is additional work for the teacher. Virtually all innovations increase the complexity of a teacher's work-life by expecting them to use different instruction material, new teaching methods and learning new content. The increased complexity often leads to teacher resistance to the innovation (Chapman and Mahlck, 2004:300). However, audio-visual materials help teachers improve their instructional efficiency. For example as indicated by Nishida (1971:20), radio, motion picture, and television can do parts of the teachers' work for parts of the period he is supposed to do by himself/herself. Besides, the teacher learns as how to use new methods of teaching and material, particularly when radio, TV and films are used. The acquisition of new methods of teaching can be both from experience, through activities, and from the broadcast meant for teachers or even from programs meant for students.

There is a tendency to learn more when the same subject is presented by an expert or someone known than the classroom teacher, particularly in the case of younger ones. Students pay greater attention and learn more when they listen to someone known to them either in repute or personally (Romiszowski, 1977:163).

A well trained teachers' or expert's methods of presentation and knowledge are special resources of the teaching learning process both for the classroom teachers and the students. In such a way a

well prepared presentation of an expert teacher is used in all schools. Courses developed by the best teachers in one country can be made available to students across many countries (Chapman and Mahlck, 2004:19).

All the efforts of planning ITV program is for efficient utilization; otherwise what has been spent in the process is a waste of resource. That is why the role of the classroom teacher in utilizing the program broadcast is said to be vital.

2.3.2. Some of the Limitations of ITV Programs

Instructional TV broadcasts are assumed to do better than the classroom teacher alone, if only the classroom teacher himself/herself is able to utilize them with necessary preparation. Most educators and TV producers would agree that television is most effective when combined with other learning experiences. This has been borne out by a large number of studies using television in conjunction with traditional instruction or with other media (Ackerman and Lipsitz, 1977:11). The benefits which can be drawn from ITV broadcasts were mentioned as in bringing specialists to the classroom, presenting well prepared material, bringing immediacy to most topics, and in providing uniform education. However, ITV is not without limitations.

The limitations of ITV can be from the nature of medium itself or other factors involved in the utilization process. No audio visual material is complete by itself. Likewise, ITV has its own drawbacks. One of its drawbacks mostly emphasized, eventually true, is that it is more of one way communication. ITV programs are broadcast at the distribution center, and the students in the schools are at the receiving end. At this point, the TV teacher may imagine as to what is happening at the schools, but can not exactly tell the real reaction of students and classroom teachers. As a result no immediate adjustment will be made to meet the actual needs of schools or Students.

Some limitations of ITV, according to Cable (1965) are:

- √ Lesson times are inflexible and consequently, sometimes inconvenient.
- √ The classroom teacher has no control over the pace of development of a television lesson.
- √ It is difficult to take account of variations in attainment and ability within an age group.

- √ Interruptions and distractions at the receiving end can seriously impair the effectiveness of a lesson.

2.4. Some Issues on Attitude and Learning

Even though there are not fundamental differences in defining what attitude is, there are two different views as far as emphasis is concerned. We have social psychologists that outwardly argue that to understand attitude, one has to stress the evaluative aspect, while some researchers contend that one has to focus on the component parts.

Social psychologists understand attitude as a favorable or unfavorable reaction toward the social world (Johnson, 1980, Gagne, 1875; Gleitman, 1987; Fazio and Roskos, 1994). According to them a person who has a positive demeanor to an object will have a positive tendency to the object, while a person with unfavorable attitude to an object will have a negative tendency to the object.

Other researchers (e.g. Myers, 1994), on the other-hand suggest that one has to focus on the component parts, that is the affective, cognitive, and behavioral parts. They argue that focusing on the component parts is necessary because if we know what the attitude of an individual is on one of the comments, we could infer what his reaction would be with regard to the remaining components.

According to Feldman (1985:121) also attitudes are organized internally among the three components: affective, cognitive and behavioral domains. The three components are generally assumed to be interrelated and consistent one another. Social psychologists argue that attitude is acquired through experience. (Baron and Byrne, 1997). Other researchers on the other hand argue that attitude is formed generally; and hence it is basically an innate phenomenon (Keller et.al., 1992). The debate attempts to show that attitude is whether acquired through experience or an inborn phenomenon. According to social psychologists, attitudes are formed through social interaction like observing what the society in general and parents in particular say or do.

Learning being a social activity it is susceptible to many different variables. Research reveals that, among other variables (things), attitude can enhance or impede learning, and that, it could lead to success or failure in performance. Student's attitude while learning something is extremely essential because it has direct interaction with their performance (Spolsky, 1989). Hence, positively oriented students, other things being equal, can surpass the negatively oriented ones. Students with

2.5. Training and Attitudinal Change for the Utilization of ITV Programs

Training is an essential means to change attitudes of teachers and improve their skills. Teachers can appropriately utilize new techniques of instruction when they are convinced of their worth. Training may be designed for higher experts and producers of ITV programs. But the best programs produced by these people may end-up in the air if teachers and students fail or refuse to utilize them, training of teachers and orienting of students, thus, becomes important.

It is essential that attitudes of teachers is positive to adopt new instructional media, in this case ITV, willingly. When new instructional media are introduced, there is a tendency to reject them, specially radio, television and teaching machines or fear of replacement on the part of teachers. However, these new media cannot replace teachers, because schools lessons are based upon intimate, face-to-face, teacher-pupil contact (Nishimoto, 1969:35).

The point, here is that teachers should be trained to be aware of the different nature of instructional media, and the value of their efforts in using educational broadcasts for their classroom instruction. In fact, positive attitudes alone are not enough for effective utilization of ITV. New techniques and equipments, to be used efficiently, need the acquisition of skills including preparing students for attending (listening). Preparing students for listening seems simple, but to minimize the attitudinal problems of teachers and students training should be provided. Besides some theoretical backgrounds need to be provided as to why ITV is needed, and what specific contribution it has especially for local or remote schools.

The limitation of each instructional medium, and the need or combined use of multi-media need justification which is possible through training. In this regard Nishida (1971:122) stated as follows:

In order to promote the use of audio visual materials and achieve favorable instructional results, it is vital for all teachers to increase their understanding of the use of the materials and learn effective methods of use. For this purpose, effort must be made to provide training at each school level.

2.6. Language Limitations on Learning through Educational Media

All broadcasting, whether educational, commercial, or informative, involves the transmission of language. In the case of television broadcasting, there might be a possibility of gaining pieces of information with little or no understanding of the language used for broadcasting. Even then, understanding of the message merely by watching the motion picture at the screen of the TV is very limited, because the images can mean many different things or nothing depending on the experience of the viewer.

Thus, it is through language that message broadcast can be communicated. Of course, other factors of cultural and psychological aspects may have impact on meanings given by listeners of the programs, but linguistic problems seem more important. In Contreras' words:

Assuming that all other conditions of the reception of an international broadcast are met, including such consideration as strength of the signal, and sociological receptivity, reception is still limited by listeners' ability to understand the language being used (Contreras, 1976:18).

Language problem is not limited to people speaking different languages from that of the broadcast. Those, even-though the broadcast is in their language may fail to perceive that message if there exists linguistic diversity (dialect). For example, Morsy (1984:338-339) has documented the problems of dialects to show how linguistic diversity affects not only the use of mass media but also person-to-person communication.

Whatever approach is used, it is not easy task to minimize the effects of language diversity (dialect) on broadcasting of educational or public services. What remains open is as to what extent the effect is server, and whether the effect is the same or different on people of different language and dialect. In general language affects the audience by being a barrier in understanding a program broadcast. The influence of language further extends to broadcasters that they become unable to break through the language barriers.

2.7 Expected Roles of Televised Lesson Classroom Teachers and Students

The televised lesson classroom teachers are expected to do a lot in accordance with teacher's guide. For successful instructional TV transmission classroom teachers are also expected to work in collaboration with the TV teachers. The collaboration of classroom teachers and TV teacher can only be real by using a television teacher guide, and it is taken as a vital bridge between a TV teacher and the classroom teacher (EMA, 2004). The teacher's guide gives basic idea to the classroom teacher.

Of course, the amount of learning derived from the transmission depends to a great extent on the effectiveness of activities of classroom teachers. In projects designed for group reception, like PTV, there is a close relationship between the programs and the activities at the receiving end.

As far as televised lesson students are concerned, their duties (activities) are also indicated in the Ethiopian newly incorporated plasma television program utilization guideline (EMA, 2006).

The following are some of the activities indicated in the PTV utilization guideline that are expected of televised lesson classroom teachers and students:

A) Expected activities of televised lesson classroom teachers:

- Before the TV program transmission
 - Preparing himself/herself in accordance with the program.
 - Introducing the day's lesson
 - Preparing his/her students to be attentive
 - Checking the plasma
- During the TV program transmission
 - Encouraging students to do activities requested by the TV teacher
 - Managing the class
 - Encouraging participation of students
 - Attending the program with his/her students
 - Giving explanations when needed/within the pauses
- After the TV program transmission
 - Discussing on the main points of TV lesson
 - Giving answer to the question raised by students (if any)
 - Giving homework

- Summing up the daily lesson, to let students do the exercise given by the TV teacher.

B) Expected activities of televised lesson students before, during and after transmission of televised learning:

- Getting themselves ready before hand on the topics to be discussed (according to the information of their teachers)
- Focusing on the program/pay attention to program
- Doing activities given by TVT and CRT
- Taking short notes
- Forwarding questions to their CRT
- Giving answers to the questions raised by the teacher.

Generally, the roles of televised lesson classroom teachers and students' are crucial for the successful accomplishment of the desired results of televised teaching learning process. Even if a master teacher (TVT) conducts a television lesson the classroom teacher (CRT) has to go through his/her standard routine. He must plan, he/she must introduce he/she must guide and he/she must follow up in order to fill in the gaps, correct misunderstanding and guide the students learning (EMA, 2004; Weghmare, 1992). Therefore, the televised lesson CRTs should be aware that PTV transmission do not relieve their responsibility for instruction.

2.8. Support Materials

With the support materials, the classroom teachers will be in a good position to determine prospective values of the lesson for particular pupils at a particular time, and to plan what to do in a class immediately prior to the televised lesson, during view in, and after viewing.

Support materials such as video cassettes, teacher's guide and instructional manual etc. are important factors that can contribute to the effective utilization of ITV programs. There is no doubt that the use of recorded video cassettes can increase the utilization of ITV programs. Reinforcing this idea, Tomalin (1986:4) states, that if the broadcast of a TV program is made available on a video cassette, and if the video recorder is under the direct control of the teacher, then the TV program immediately becomes a highly effective teaching medium.

When explaining, Tomalin (1986) further gives the following reasons: the program can be played as many times as the learner wishes; a short sequence from the program can be selected for

intensive study and worked on by the teacher in the classroom; the learner can interpret what has been said, repeat it and predict the relay and so on. The learner can also concentrate in detail on visual clues to meaning such as facial expression, dress, and gesture of the characters in the story.

The instructional manual for user teachers are most important. They are of critical importance for televised lessons. A good television manual gives the objectives of the lesson, the special vocabulary used, key questions the students usually ask (with suggested answers!), outline of the content, bibliography, the charts and diagrams that are displayed during the televised lessons and should be available later for reference, additional readings, follow-up activities

Above all, the use of pre-recorded ITV programs in video cassette recorders is of paramount importance, especially where the school timetables of secondary schools do not fit the ITV broadcasting schedules.

The other important factors that can contribute to the effective utilization of instructional television programs are support materials such as teacher's guide and instructional manual. Teacher's guide giving details of program content and suggestions, for pre, time in, and post broadcast work with the class are essential. Thus, teachers need to have the guidance note. Besides, since teacher's guide gives only suggestions as to how to utilize each program, teachers are expected to design additional activities so as to help students benefit from the ITV lessons. Therefore, without these materials at hand, utilization activities may not be 'properly' carried out.

CHAPTER III

ANALYSIS AND INTERPRETATION OF DATA

In this chapter the data collected on the basis of basic questions are presented, analyzed, and interpreted by using tables and textual discussions. As such it forms the fundamental ground to conclusions and recommendations of the study. Accordingly, the data gathered and analyzed in this chapter includes the necessary profiles of the respondents.

The data were collected using instruments. Then the results are presented and discussed in different sections in relation to the attitudes of teachers and students towards using plasma television for instruction. The specific issues focused mainly on televised teaching-learning, students' behavior, classroom teachers' behavior, TV teachers' behavior, and televised teaching facilities/aspects. In general, an attempt is made to explain the results of the study as to answer the research questions raised in the study.

3.1 Characteristics of the Study Population

A total of 515 questionnaires were distributed to 75 teachers and 440 students. Of which 66 or 88 percent from the teachers and 374 or 85 percent from the students were properly filled in and returned. Based on the responses obtained, analysis and interpretation of the data are made.

Table 1: Background Characteristics of Student Respondents (N = 374)

Ser. No.	Response items	Frequency number	Percent
1	Sex	Male	51.3
		Female	48.7
2	Distribution by school	Fasilo G.S.S	12.0
		Ghion G.S.S	21.4
		Tana Haik G.S.S	66.6
3	Access to TV at home	Yes	49.5
		No.	50.5
4	Age – group	Below 14	0.3
		14 – 18	93.3
		Above 18	6.3

G.S.S = General Secondary School

As can be seen from Table 1 above, the distribution of the student respondents in terms of sex is nearly balanced (Male 51.3 percent and female 48.7 percent). In the same way the distribution

of the student respondents in terms of access to television at home or in their own house reveals that nearly equal number of respondents were found as having (49.5 percent) and not having (50.5 percent) at their homes.

Regarding the distribution of student respondents in terms of school, the majority of respondents (66.6 percent) were from Tana Haik General Secondary School. This was because of the proportion of the total school population the sampling was determined. In terms of age-group composition, majority of student respondents (93.3 percent) were from 14-18 years old category.

Table 2: Background Characteristics of Teacher Respondents (N=66)

Ser. No.	Response Items	Frequency	Percent	
1	Sex	Male	57	86.4
		Female	9	13.6
2	Distribution of teachers by school	Fasilo G.S.S	11	16.7
		Ghion G.S.S	20	30.3
		Tana Haik G.S.S	35	53.0
3	Age group	20-30	21	31.8
		31-40	16	24.2
		41-50	24	36.4
		Above 50	5	7.6
4	Total teaching experience (in years)	0-10	15	22.7
		11 – 20	19	28.8
		21 – 30	25	37.9
		Above 30	7	10.6
5	Televised teaching experience (in years)	0 – 1	7	10.6
		2	31	47.0
		3 and above	28	42.4
6	Qualification	2+2 (diploma)	1	1.5
		12+3	5	7.6
		1 st degree	60	90.9

G.S.S = General Secondary School

As mentioned in chapter one of this study, available televised lesson teachers (all) were included as respondents. In terms of total teaching experience, the majority of teacher respondents (77.3 percent) had above 10 years of services. This is not surprising because Bahir Dar town being the capital of Amhara Region, the fresh graduates in most cases were not placed in the General Secondary Schools of this special zone. Age wise, the majority of teacher respondents (68.2 percent) were above 30 years old. The majority of teacher respondents (90.9 percent) were first degree

holders, while the rest (9.1 percent) were with the qualification of below first-degree. The distribution of the teacher respondents in terms of sex indicates that the majority (86.4 percent) were males, while the remaining (13.6 percent) were females.

3.2 The Mode of Presentation of TV Teachers

The Plasma Television (PTV) transmission is assumed to do better than the classroom teacher alone. In this case, the teacher and student respondents were asked about the mode of presentation of TV teachers. Language usage (English), pace and clarity of TV teaches' explanation are treated in this section.

3.2.1 Simplicity of the Language of Medium of Instruction

Table 3

Ratings of TV Teachers' Usage of Instructional Medium (English)

No.	Items	Respondents	Responses										Total
			Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
			No	%	No	%	No	%	No	%	No	%	
1	TV teacher uses easily understandable language for instructions	Teachers	3	4.5	33	50.0	11	16.7	17	25.8	2	3.0	66
2	I like televised learning because TV teacher uses easily understandable language for instructions	Students	65	17.4	104	27.8	28	7.5	88	23.5	89	23.8	374

As can be seen from Table 3 about 54.3 percent of the distribution of teacher respondents have shown positive reaction with regard to easily understandability of TV teachers' language (English) for instruction. On the other hand, about 28.8 percent of teacher respondents reported that the language utilized by the TV teachers was beyond the capacity of the learners. The rest 16.7 percent of teacher respondents were unable to decide on the issue.

The majority of the student respondents responded that the TV teachers do not use easily understandable language for instruction. This was confirmed by about 47.3 percent of students respondents in Table 3. The second large number of student respondents, about 45.2 percent, have shown favorable attitude towards TV teachers' instructional language utilization. In the open-ended part of the questionnaire, student respondents attributed their English language low proficiency to the background of their junior secondary school (Grades 7th and 8th) which made Amharic to be the medium of curriculum except English as a subject by the new education policy (1994)

The justification of students respondents who believe that it was due to their poor background which disfavored the instructional language utilization of TV teachers appears relevant. In the absence of good background of instructional medium (English), understanding of the message merely by watching the TV screen is very difficult.

3.2.2 The Pace/Speed of TVT While Presenting Lesson

Table 4 - The Opinion of Teachers and Students on the Pace of TVT While Presenting Lesson

Ser No.	Items	Respondents	Responses										Total
			Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
			No	%	No	%	No	%	No	%	No	%	
1	Students have difficulties with televised teaching in taking notes from TV screen	Teachers	9	13.6	33	50.0	5	7.6	12	18.2	7	10.6	66
2	I found that TV teacher is too fast to take notes from TV screen	Students	117	31.3	80	21.4	7	1.9	118	31.6	52	13.9	374

In item one of the Table 4, out of the total teacher respondents the large majority, about 63.6 percent replied that their students have difficulties with televised learning in taking notes from TV screen. In the same table, out of the total student respondents about 52.7 percent responded that they found TV teachers to be too fast to take notes from the TV screen. This implies that the pace of the

televised lesson is unmanageable and hence students in most cases passively looked at the screen without attempting to take down notes from the TV screen.

On the contrary, 28.8 percent of teacher respondents and 45.5 percent of student respondents reported that the pace of TV teacher while presenting lesson cannot be taken as the difficulty/problem. The rest 7.6 percent of teacher respondents and 1.8 percent of student respondents were not able to decide on the issue. Specially on the open-ended part of the questionnaire of this study, the majority of both teacher and student respondents seriously opposed the pace of the TV teachers while presenting lessons.

As reported by classroom teachers and students (respondents) pace of transmission, its wait-time for questions and note taking is one of the major causes for teachers and students developing negative attitude towards using plasma TV for instruction in their schools. Of course, the fastest pace of TVT, as confirmed by classroom teachers, is suitable to cover contents and finish the textbook within the academic year without taking into consideration whether the students understand or not. But the consequence of this sort of rushing made most students disinterested in using plasma TV for instruction, since its pace was not compatible with their learning ability in a foreign-language medium context.

Understanding basic concepts through televised learning, as reported by student respondents is unthinkable due to the speed of plasma TV transmission. The students expressed to the extent that the pace of televised lesson is beyond their learning ability. Generally the pace of TVT, as pointed out by the respondents has confused most students and even classroom teachers to cope up with it. During the observation session of this study, in the study areas, what the researcher observed about the pace of TV teacher was not different from stated by the respondents.

Moreover, the teacher respondents were asked whether they found that TV teachers emphasized on what is known and obvious to the students. In this regard the majority of teacher respondents reported that TV teachers do not emphasize on already known matters.

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Moreover, the teacher respondents were asked whether they found that TV teachers emphasized on what is known and obvious to the students. In this regard the majority of teacher respondents reported that TV teachers do not emphasize on already known matters.

3.2.3 Clarity of TV Teachers' Explanation

Table 5 – Opinion of Teachers and Students Regarding Clarity of TV Teachers Explanation

Ser No.	Items	Respondents	Responses										Total
			Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
			No	%	No	%	No	%	No	%	No	%	
1	Students understand easily and clearly the explanation of TV teachers	Teachers	5	7.6	17	25.8	10	15.2	28	42.4	6	9.1	66
2	The explanation of TV teacher has become clear	Students	49	13.1	98	26.2	66	17.6	88	23.5	73	19.5	374

The opinion of teacher and student respondents regarding clarity of the TV teachers' explanation coincided as the case of pace of TVTs. As shown in item one of the Table 5, about 51.5 percent of teachers responded that their students do not understand easily and clearly the explanations of TVT. In the same way, out of the total student respondents 43 percent of them negatively rated the clarity of the explanation of TVTs. On the other hand, 33.3 percent of teachers and 39.3 percent of student respondents positively rated the clarity of the explanation of TVT. 15.2 percent of teachers and 17.7 percent of students were unable to decide on the issue.

From these responses it can be stated that explanations of TV teachers were not clear to the extent that students could understand easily and clearly. The problems of clarity mentioned by the majority of respondents in the open-ended part of questionnaire of this study were the accent (pronunciation) of TV teachers (especially foreigners) and the atmosphere of televised classrooms. As reported by student respondents and confirmed by teacher respondents the accent of TV teachers has created the gap between students and their lessons. According to the responses, it is difficult to understand the language and accent of TV teachers unless the concepts are either rephrased or translated into Amhraic. But the question is how long? Is it appropriate methodology? The atmosphere of televised classes is also reported as the cause for unclear explanations of TVT. As reported by CRTs large class sizes and noise from the plasma TV (background) during the

transmission time together with the accent of TVT made the explanation of TVT difficult to understand to the students.

Moreover, student respondents have reported that televised classes to be boring to them. Therefore, as reported by the respondents, boring and vagueness of the explanation of TVT can be taken as one of the causes for the respondents' tending to develop unfavorable attitude towards using PVT for instruction.

3.3. Students' Behavior and Televised Learning

3.3.1 Classroom Participation

Table 6 – Opinion of Teachers and Students Regarding the Classroom Participation of Students

Ser No.	Items	Respondents	Responses										Total
			Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
			No	%	No	%	No	%	No	%	No	%	
1	Televised teaching makes students passive in the class	Teachers	5	7.6	26	39.4	9	13.6	19	28.8	7	10.6	66
2	I don't like televised learning because it makes me passive in the classroom	Students	64	17.1	115	30.7	22	5.9	98	26.2	75	20.1	374

As shown in Table 6, about 39.4 percent of the teachers and 46.3 percent of students, relatively reasonable number of respondents, favored the televised learning for the class participation. On the contrary the great majority of respondents reported that televised teaching to be unfavorable for the class participation of students, but rather made students passive in the class. This is affirmed by about 47 percent of teacher respondents. In the same way about 47.8 percent of student respondents confirmed that they do not like televised learning because of its non-participatory nature. 13.6 percent and 5.9 percent teacher and student respondents respectively were unable to decide on the issue.

The reasons, given by respondents (teachers and students) for passiveness of class are the fastest pace of TV teacher, difficulty of medium of language (English) used by TV teacher, insufficient time allotted for discussion and the very nature of plasma TV that do not allow the TV teacher to see, listen to and understand the difficulties of students. According to the views of teacher respondents, as reported in the open-ended part of the questionnaire, teaching by plasma TV is even more rigid than the teacher – centered methodology which was blamed for its non-participatory nature of approach. In this regard plasma TV is found to be far from initiating active learning. Therefore, in such circumstances, it is difficult to expect positive attitude from respondents towards using PTV for instruction.

3.3.2 Motivation and Progress of the Students Learning

Table 7 – Responses Regarding Students’ Motivation and Progress of Learning

Ser No.	Items	Respondents	Responses										Total
			Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
			No	%	No	%	No	%	No	%	No	%	
1	Televised teaching stimulates students learning interests	Teachers	9	13.6	17	25.8	17	25.8	15	22.7	8	12.1	66
2	Televised teaching stimulates my learning interest	Students	87	23.3	80	21.4	32.0	8.6	85	22.7	90	24.1	374

As shown in Table 7, teachers’ opinion regarding the learning motivation of students in televised classes did not coincide with the opinions of students on the same issue. About 39.4 percent of teacher respondents found that televised teaching stimulates students’ learning interest. Whereas 34.8 percent of teacher respondents rated the stimulating power of televised teaching-learning negatively and the rest 25.8 percent were unable to decide.

In the case of student respondents, regarding the stimulating power of televised learning, about 44.7 percent of them responded/rated positively where as 46.7 percent of student respondents rated negatively. And the rest 8.6 percent of respondents are neutral/unable to decide on the issue.

The percentage of teachers who rated the stimulating power of televised teaching as favorable/positively seems large when compared to those who unfavored the stimulating power of televised teaching learning. But when we look at the distribution as favorable, undecided, and unfavorable 39.4, 25.8 and 34.8 respectively, above 60 percent of the teacher respondents didn't favor the stimulating power of televised teaching learning. That is to say, teacher respondents who favored teaching through PVT for stimulating students learning interest are by far below half of the total respondents. In this case one can say that teaching learning through PTV is not initiating students learning interests.

The teacher respondents were also asked whether the students are showing progress due to televised learning. Only 31.8 percent of teacher respondents reported that many of the students are showing progress due to televised learning. On the contrary, greater percentage of teacher respondents, 36.4 percent of them, reported that many of the students did not show progress after the introduction of plasma TV for instruction. The rest 31.8 percent of teacher respondents were unable to decide on the issue. The percentage of teachers who considered the plasma TV to be the cause for the students progress in learning is equal to (with) those who are unable to decide (i.e. 31.8 percent).

On the open-ended part the questionnaire of this study, teacher respondents indicated that unmanageable pace of TV teachers' presentation and incompatible students' English language (medium of instruction) ability made the students confused and as a result led them to poor performance. According to the respondents, the consequence of such situation forced the students to develop negative attitude towards using PTV for instruction.

3.4 Televised Lesson Classroom Teachers' Behavior

3.4.1 Interests of Televised Lesson CRTs in the profession

Table 8 – Opinion of Respondents Regarding CRTs Interest in the Profession

Ser No.	Items	Respondents	Responses										Total
			Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
			No	%	No	%	No	%	No	%	No	%	
1	Teaching of televised lesson made me more interested in the profession	Teachers	12	18.2	20	30.3	10	15.2	16	24.2	8	12.1	66
2	Many teachers of televised lessons are interested in teaching	Students	91	24.3	70	18.7	44	11.8	95	25.4	74	19.8	374
3	Most of televised lessons classroom teachers gave up their duty to the TV teachers	Students	116	31.0	71	19.0	20	5.3	113	30.2	54	14.5	374

The opinion of teacher and student respondents regarding the interests of televised lesson CRTs in the profession didn't coincide. According to the responses of teachers in item one of Table 8, the interest of CRTs in the profession seems relatively high. About 48.5 percent of teacher respondents rated positively the interest of televised lesson CRTs in the profession. In fact, this percentage is below half (50 percent) and we cannot conclude by saying that televised lesson CRTs have positive attitude towards teaching profession. The rest 15.2 percent and 36.3 percent of teacher respondents were unable to decide and negatively rated the interest of televised lesson CRTs in the profession respectively.

In item two of Table 8, only 43 percent of student respondents reported that televised lesson classroom teachers are interested in teaching. In contrast, 45.2 percent relatively high number of student respondents negatively rated televised lesson classroom teachers' interest in the profession, whereas the rest 11.8 percent of the student respondents were unable to decide. In item three of Table 8, majority of student respondents reported that most of televised lesson CRTs gave up their duty to the TV teacher. This is affirmed by 50 percent of respondents. On the other hand 44.7

percent of student respondents did not support the statement indicated in item three of Table 8. The rest 5.3 percent of student respondents were not able to decide on the issue.

3.4.2 Interaction of Televised Lesson CRTs with Their Students

Table 9 – Opinions of Teachers and Students Regarding the Interaction of Televised Lesson CRTs with Their Students

Ser No.	Items	Respondents	Responses										Total
			Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
			No	%	No	%	No	%	No	%	No	%	
1	Many teachers of televised lessons do not show interest in their student	Students	67	17.9	98	26.2	49	13.1	103	27.5	57	15.3	374
2	Televised teaching Lessens the importance of classroom teachers	Teachers	9	13.6	22	33.3	9	13.6	15	22.7	11	16.7	66

Although 42.8 percent of student respondents in Table 9 of item one revealed that many teachers of televised lessons show interest in their students, on the other hand about 44.1 percent of student respondents reported that, many teachers of televised lessons do not show interest in the students. As student respondents indicated in the open-ended part of the questionnaire, after the introduction of plasma TV for instruction, many teachers of televised lessons have become unsupportive and passive in their role. The rest 13.1 percent of student respondents were unable to decide on the issue.

In item two of Table 9, only 39.4 percent of teacher respondents didn't accept the idea that "televised teaching lessens the importance of classroom teacher." But about 47 percent of teacher respondents admitted that televised teaching lessens the importance of classroom teacher. The teacher respondents in the open-ended part of the questionnaire revealed that the role of classroom teachers with the televised lessons is reduced. This reduction of their role in the classroom, as believed by teacher respondents, made them less important in the teaching-learning process. As stated by teacher respondents, their role is reduced too much during the plasma TV lessons. During

the televised situations, they usually prepared for ten minutes or less to present or lecture since they were given that much amount of time. In this case, the interaction of televised lesson CRTs with their students is not to the extent of its importance.

3.5 Teachers' and Students' Opinion on the Application of PTV Program

Table 10 – Responses Regarding the Application of PTV Program

Ser No.	Items	Respondents	Responses										Total
			Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
			No	%	No	%	No	%	No	%	No	%	
1	Televised teaching is not applicable to the schools of our country	Teachers	5	7.6	20	30.3	7	10.6	19	28.8	15	22.7	66
2	I don't like televised learning because it is beyond the reach of my standard/capacity	Students	70	18.7	87	23.3	64	17.1	78	20.9	75	20.1	374
3	I feel that teaching/learning through plasma TV to be waste of time and other resources	Teachers	9	13.6	18	27.3	9	13.6	18	27.3	12	18.2	66
		Students	70	18.7	107	28.6	31	8.3	70	18.7	96	25.7	374

As can be observed from item one of Table 10, teacher respondents of 51.5 percent reported that televised teaching is applicable to the schools of our country. But according the responses of 37.9 percent of teacher respondents, televised teaching is not applicable to the schools of our country. The teacher respondents those who favored the applicability of televised teaching in our country argued, in the open-ended part of the questionnaire, that with the improvement of pace of TV teachers' presentation, time allotment and medium of instruction (English language) the applicability of televised teaching in our country is doubtless.

The responses of the majority student respondents in item two of Table 10, was the reverse of teacher respondents. 42 percent of student respondents considered televised learning as beyond the reach of their standard/capacity. On the other hand, 40.9 percent of student respondents reported that televised learning is not beyond the reach of their standard/capacity.

In item three of table 10, about 45.5 percent of teacher respondents did not accept the statement that considered teaching through plasma TV as waste of time and other resources. On the contrary, 40.9 percent of teacher respondents considered teaching through plasma TV as waste of time and other resources. About 47.3 percent of student respondents indicated that learning through plasma TV to be waste of time and other resources. The second majority, 44.4 percent of student respondents reported that they did not feel learning through plasma TV as waste of time and other resources.

The responses of the students seem to approve the assumptions of most people who considered teaching through plasma TV as wasting the economy of the country. The underlying reason for such generalization, as pointed out by the respondents in the open-ended part of the questionnaire, is unsuitable mode of presentation of TV teacher. This implies the hopelessness of most students on learning through PTV and as a result, developing negative attitude towards using it for instruction.

3.6 Televised Lesson Classes are Difficult to Manage

Table 11 – Opinion of the Respondents Regarding the Televised Classes

Ser No.	Items	Respondents	Responses										Total
			Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
			No	%	No	%	No	%	No	%	No	%	
1	I have difficulties with televised teaching to manage class	Teachers	2	3.0	28	42.4	3	4.5	23	34.8	10	15.2	66
2	Televised lesson students do not pay attention to the instructions of classroom teacher	Teachers	7	10.6	18	27.3	11	16.7	21	31.8	9	13.6	66
3	I don't like televised learning because it does not take into account individual differences	Students	83	22.2	89	23.8	43	11.5	73	19.5	86	23.0	374
4	I have difficulties with televised teaching to assist slow learners	Teachers	20	30.3	16	24.2	11	16.7	11	16.7	8	12.1	66

With regard to the difficulties of managing televised lesson classes, 50 percent of teacher respondents in item one of Table 11, reported that they did not have difficulties. On the other hand, 45.5 percent of teacher respondents indicated that managing televised lesson classes to be difficult. In relation to this, 37.9 percent of teacher respondents in item two of Table 11, reported that televised lesson class students did not pay attention to the instructions of classroom teacher. On the contrary, as indicated in item two of Table 11, according to the responses of 45.5 percent of teacher respondents, televised lesson students have no problem in paying attention to the instructions of classroom teacher. The rest 16.7 percent of teacher respondents were unable to decide on the issue.

In this case the responses of teachers have indicated the existence of difficulties to manage televised classes. Because the respondents who denied the presence of difficulties to manage televised classes were below half of the total respondents.

Moreover, it is evident from item three of Table 11 that 46 percent of student respondents confirmed that televised learning did not take into account individual differences. This category of respondents indicated, in the open-ended part of the questionnaire that televised teaching without taking into account individual differences simply rushed as if all the learners were uniformly understanding the presentations. On the other hand, 42.5 percent of student respondents supported televised learning for its taking into account individual differences during presentation. The rest of 11.5 percent of student respondents were unable to decide.

In item four of Table 11, about 54.5 percent of teacher respondents reported that they have difficulties with televised teaching to assist slow learners. This implies that the televised teaching did not take into account the individual differences. On this point, the responses of the majority of teacher respondents coincided with the majority of students respondents (see Table 11). 28.8 percent of teacher respondents believed in that televised teaching takes into account individual differences. The rest 16.7 percent of teacher respondents were unable to decide on the issue.

Therefore, according to the responses of majority of the respondents (both teachers and students), televised teaching does not take into account the individual differences of the learners. Due to such inconsiderate approach of televised teaching, classroom teachers are facing difficulties to assist slow learners. And hence, in such circumstances, it is not difficult to imagine what type of attitude teachers and students are to develop other than negative.

3.7 Televised Teaching-Learning and Some of Its Merits

3.7.1 Televised Teaching Narrows Existing Gap among Schools

Table 12 – Teachers’ Opinion Whether Televised Teaching Narrows the Gap among Schools

Ser No.	Items	Respondents	Responses										Total
			Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
			No	%	No	%	No	%	No	%	No	%	
1	Televised teaching narrows the gap among schools	Teachers	24	36.4	27	40.9	5	7.6	-	-	10	15.2	66
2	Televised teaching improves the quality of education	Teachers	11	16.7	22	33.3	14	21.2	13	19.7	6	9.1	66

As has been depicted in item one of Table 12, great majority of teacher respondents, about 77.3 percent believed in that televised teaching narrows the existing gap among schools. It was only 15.2 percent of teacher respondents that negatively rated the ability of televised teaching for narrowing the existing gap among schools.

Teachers in the open-ended part of the questionnaire, school principals and zone education head when interviewed have emphasized on the importance of televised teaching for the equity of education among the schools. But according to the responses of some teachers, this sort of uniformity is not favoring all the schools, rather it favored only those students who are fluent in the language of medium of instruction (English) in well organized schools. In this case, according to these respondents, televised teaching widens the existing gap among schools and even among students.

As reported by the majority of teacher respondents the gap among schools can be minimized due to televised learning. Because the students and classroom teachers’ roles are reduced to the extent of simply staring at TV screen. That is to say, in the situation when and where the roles of all the televised lesson CRTs are reduced to the extent of passiveness, the reduction of the gap among the schools is inevitable.

As can be observed from item two of Table 12, out of total teacher respondents only 50 percent of them believed in that televised teaching improves the quality of education, whereas 28.8 percent of the respondents did not believe in that televised teaching will improve the quality of education. Basically one of the objectives of introducing PTV for instruction was to improve the quality of education. But, from the sampled schools about half (50 percent) of the respondents (teachers) who are engaged in the profession didn't believe in it.

3.7.2 Televised Teaching Helps CRTs to Improve Their Teaching Methodology

Table 13- Teachers Opinion Whether Televised Teaching Improves CRTs Teaching Methodology

Ser No.	Items	Respondents	Responses										Total
			Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
			No	%	No	%	No	%	No	%	No	%	
1	Televised teaching helped me to improve my teaching methodology	Teachers	12	18.2	23	34.8	10	15.2	13	19.7	8	12.1	66
2	Teachers of televised lessons will have good opportunity to learn better teaching techniques from TV teachers	Teachers	14	21.2	30	45.5	6	9.1	10	15.2	6	9.1	66

According to the responses of teachers in item one of Table 13, about 53 percent of them positively rated the importance of televised teaching to improve their own teaching methodology. On the other hand, 37.8 percent of teacher respondents did not accept the importance of televised teaching to improve their teaching methodology. The rest 15.2 percent of them were unable to decide. In the same way, in item two of Table 13, about 66.7 percent of teacher respondents believed in that classroom teachers of televised lessons will have good opportunity to learn better teaching techniques from TV teachers. In contrast, about 24.2 percent of teacher respondents negatively rated the statement.

In the open-ended part of the questionnaire most of the teacher respondents clearly stated that televised teaching has improved their teaching methodology. But, as reported by teachers, the main problem is that they are not allotted sufficient time to implement the methodology.

3.7.3 Televised Teaching Helps Students to Improve Listening Skills

Table 14 – Opinions of Teachers and Students Whether Televised Teaching Improves Students’ Listening Skills

Ser No.	Items	Respondents	Responses										Total
			Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
			No	%	No	%	No	%	No	%	No	%	
1	I found that televised teaching helps students develop their listening skills	Teachers	10	15.2	25	37.9	10	15.2	15	22.7	6	9.1	66
2	I like televised learning because it helps me develop my listening skill	Students	87	23.3	97	25.9	28	7.5	84	22.5	78	20.9	374

Concerning the role of televised teaching for the improvement of students listening skills, in item one of Table 13, about 53 percent of teacher respondents positively rated the statement. But 31.8 percent of teacher respondents reported that they didn’t find televised teaching to be important for the improvement of students listening skills. The rest 15.2 percent of teacher respondents were unable to decide on the issue.

In item two of Table 14, about 49.2 percent of student respondents reported that televised learning helped them to develop their listening skills. On this point the responses of students coincided with the response of teachers. That is to say that, the majority of both teachers and students positively rated the role of televised teaching to develop the listening skills of students. In contrast, 43.3 percent of student respondents didn’t believe in the role of televised teaching to improve the listening skills of students/them.

In the open-ended part of the questionnaire the student respondents who did not believe in the role of the televised teaching-learning for the improvement of listening skills indicated that they cannot listen most of the TV teachers' accent (especially foreigners').

The teacher respondents were asked whether topics that are not sufficiently presented on textbooks are enriched by TVTs. In this regard, the great majority of teacher respondents reported that topics which were not sufficiently presented on the textbooks were enriched by TV teachers. This was affirmed by about 80.3 percent of the respondents. Only 12.1 percent of respondents rated the statement negatively, whereas the rest 7.6 percent of the teacher respondents were unable to decide on the issue.

3.8 Time Allotted to the CRTs is not Sufficient/Enough

Table 15 – Opinions of Teachers and Students Regarding Time Allotted to the CRTs

Ser No.	Items	Respondents	Responses										Total
			Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
			No	%	No	%	No	%	No	%	No	%	
1	Time allotted to CRT for the revision of one lesson is sufficient	Teachers	9	13.6	17	25.8	6	9.1	28	42.4	6	9.1	66
2	I think, time allotted to TV teacher is excess as compared to time allotted to CRT	Students	131	35.0	70	18.7	17	4.5	88	23.5	68	18.2	374

With regard to the time allotted to the classroom teachers, as can be observed from item one of Table 15, the majority of teacher respondents negatively rated the allotment. 51.5 percent of teacher respondents reported that time allotted to the CRT for the revision of one lesson is insufficient (not enough). 39.4 percent of teacher respondents agreed that the allotted time to the CRT for the revision of one lesson to be sufficient/enough. The rest 9.1 percent of teacher respondents were unable to decide on the issue.

In item two of Table 15, about 53.7 percent of student respondents reported that time allotted to TV teacher is excess as compared to time allotted to the classroom teacher. The opinions of

students regarding time allotted to the classroom teachers coincided with the opinions of classroom teachers, both students and classroom teachers in this regard are claiming/demanding for more time to the classroom teachers. 41.7 percent of student respondents positively rated already allotted time to the classroom teachers and TV teachers, whereas 4.6 percent of student respondents were unable to decide on the matter.

As reported by the majority of both respondents (teachers and students) time allotted to the classroom teacher to revise one lesson (in one period) is only ten minutes. But teachers and students demand more time to interact (discuss), to make teaching learning process live. Therefore, time allotted to the classroom teacher is not sufficient and due to this case also students and CRTs are blaming the existing televised teaching learning system.

3.9 Plasma Transmission is not Related to Teaching Materials

Table 16 – Opinions of Teachers and Students Whether Plasma Transmission is in Line with Teaching Materials

Ser No.	Items	Respondents	Responses										Total
			Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
			No	%	No	%	No	%	No	%	No	%	
1	The students textbooks, teachers guide and the plasma transmission are related to the extent of its importance	Teachers	8	12.1	20	30.3	6	9.1	21	31.8	11	16.7	66
2	All my textbooks of televised lessons are in line with plasma transmission	Students	90	24.1	71	19.0	41	11.0	96	25.7	76	20.3	374

As can be seen from item one of Table 16, about 48.5 percent of teacher respondents reported that to some extent plasma transmission is not in line with the teaching materials. But 42.4 percent of teacher respondents reported that the plasma transmission is in line with teaching materials. The rest 9.1 percent of teacher respondents were unable to decide.

In item two of Table 16 about 46 percent of student respondents reported that to some extent plasma transmission is not in line with the learning materials. On the other hand, about 43 percent of

student respondents reported that the plasma transmission is in line with learning materials. The rest 11 percent of student respondents were unable to decide on the issue.

On the open-ended part of the questionnaire, the respondents indicated that for some subjects, textbooks and teacher's guides are already replaced by new ones/for example grade 10 English). But the plasma transmission of grade 10 English subject, during data collection period for this study on October, 2006, was on the air from the old textbooks. The school principals in the interview section responded that such and other problems encountered during transmissions are known and reported to zone education office. The zone education office head in the interview part, also responded that the problem is beyond their capacity and what they did is informing concerned bodies. The consequence of such sort of mess up, therefore, forces teachers and students to develop negative attitude towards using PTV for instruction.

3.10 Supports Needed for Televised Teaching Learning Process

3.10.1 Provision of Support Materials

Table 17 Teachers' Opinion Regarding Provision of Support Materials

Item	Respondents	Responses										Total
		Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
		No	%	No	%	No	%	No	%	No	%	
There are sufficient TV lesson manuals and support materials in our school	Teachers	7	10.6	8	12.1	3	4.5	31	47.0	17	25.8	66

It is evident from Table 17 that an overwhelming majority of teacher respondents reported that, there are no sufficient TV lesson manuals and support materials in the sampled schools. More specifically, about 72.8 percent of teacher respondents negativity rated the availability of TV lesson manuals and support materials in the sample schools. Basically, support materials are expected to increase the use of instructional TV programs.

Teachers in the open-ended part of the questionnaire and school principals in the interviews repeatedly indicated the need for support materials such as teacher's guides, instructional manuals

and videocassettes to make televised teaching learning live. As reported by the teacher respondents the lack of students' textbooks are also evident.

The zone education office head during the interview confirmed the lack of support materials to facilitate televised teaching-learning process. But, as the official indicated, the solutions to the most problems related to televised teaching at presented is expected to flow from "Top to Down". It appears that less attention is given to the televised teaching learning not only by teachers and students but also by school principals and zone education officials.

3.10.2 Provision of Plasma TV Program (PVT) Utilization Orientation/Training

**Table 18 – Teachers' Opinion Regarding Provision of PTV Utilization
Orientation/Training**

Item	Respondents	Responses										Total
		Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
		No	%	No	%	No	%	No	%	No	%	
I have received sufficient orientation/training related to the utilization of ITV programs	Teachers	2	3.0	5	7.6	2	3.0	25	37.9	32	48.5	66

The great majority of teacher respondents reported that they are not oriented/trained about the utilization of instructional TV in their classrooms. This is affirmed by about 86.4 percent of them in Table 18 above. Only 10.6 percent of teacher respondents indicated that they have received orientation. Even those who have reported their participation in utilization orientation indicated the inadequacy of the orientation in the open-ended part of the questionnaires.

Assigning teachers without awareness raising orientation/training might lead teachers to develop negative attitude towards using plasma TV for instruction. The school principals and zone education head, during interview admitted that most of the teachers are not oriented about the utilization of PTV in the classroom. This is the indication that teachers are not getting appropriate support (including supervisory) from the local officials.

3.11 Televised Learning and Disturbance of the Interruption of Electric Power Supply

Table 19 - Students' Opinion Regarding the Disturbance of Electric Power Interruption during Transmission

Item	Respondents		Responses								Total	
			Strongly agree		Agree		Undecided		Disagree			Strongly disagree
	No	%	No	%	No	%	No	%	No	%		
One of the difficulties during televised learning in our school is the interruption of electric power supply	Students	104	27.8	88	23.5	13	3.5	89	23.8	80	21.4	374

In Table 19, out of the total student respondents the majority of them replied that one of the difficulties of televised learning in their respective schools to be the interruption of electric power supply during the plasma TV transmission. This is confirmed by about 57.3 percent of student respondents. On the other hand, 45.2 percent of student respondents reported that electric power supply interruption is not the significant problem of their school.

Regarding the electric power supply interruption classroom teachers in the open-ended part of the questionnaire and school principals while interviewed repeatedly and seriously indicated the prevalence of the problem. As reported by teachers and school principals and finally confirmed by zone education office head, there is no technician who can solve the problems related with PTV transmission interruption let alone at school level even at zone education office level. This implies that due consideration is not given to the issue.

3.12 Plasma TV Didn't Facilitate Learning Better Than Classroom Teachers

Table 20 – Opinions of Teachers and Students Whether PTV Facilitated Learning Better Than CRTs

Ser No.	Items	Respondents	Responses										Total
			Strongly agree		Agree		Undecided		Disagree		Strongly disagree		
			No	%	No	%	No	%	No	%	No	%	
1	I like televised learning because TV teacher can teach better than classroom teachers	Students	55	14.7	102	27.3	42	11.2	97	25.9	78	20.9	374
2	Students can best learn without instructional television	Teachers	5	7.6	19	28.8	12	18.2	24	36.4	6	9.1	66
3	I found that learning through PTV to be indispensable	Students	72	19.3	92	24.6	34	9.1	83	22.2	93	24.9	374
4	I like televised learning because TV teacher makes use of more teaching aids	Students	99	26.5	124	33.2	23	6.1	87	23.3	41	11.0	374
5	I wish non televised lessons to be televised	Students	80	21.4	89	23.8	28	7.5	97	25.9	80	21.4	374
6	I recommended that non televised lessons should be televised	Teachers	13	19.7	20	30.3	9	13.6	14	21.2	10	15.2	66

In the item one of Table 20 about 46.8 percent of student respondents reported that televised learning didn't facilitate learning better than classroom teachers. 42 percent of student respondents however, indicated that plasma TV has facilitated learning better than classroom teachers. But the rest 11.2 percent of student respondents were unable to decide.

In item two of Table 20, about 45.5 percent of teacher respondents reported that students can best learn with instructional TV. On the contrary, 36.4 percent of teacher respondents reported that

students can best learn without instructional TV. The rest reasonable number (18.2 percent) of teacher respondents were unable to decide on the issue. In this case teacher respondents who are favoring the implementation of PTV for instruction are fallen below half (50 percent) of the total teacher respondents.

In item three of Table 20, the student respondents were asked whether learning through PTV to be indispensable. According to their responses about 47.1 percent of them didn't believe in the importance of learning through PTV. On the contrary, 43.9 percent of student respondents reported that they believed in the indispensability of learning through PTV. The rest about 9.0 percent of student respondents were unable to decide in the issue.

In item four of Table 20 with regard to teaching aids used by TVTs about 59.6 percent of student respondents positively rated the statement. In the open-ended part of the questionnaire both respondents (students and teachers) appreciated TV teachers' utilization of teaching aids.

Moreover, the respondents were asked about their opinion towards non-televised lessons. Whether non televised lessons to be televised or not. The majority of student respondents supported non-televised lessons to continue without being televised. This was affirmed by about 47.3 percent of student respondents. On the other hand, about 45.2 percent of student respondents wished non-televised lessons to be televised.

In the case of teacher respondents, 50 percent of total respondents have recommended that non-televised lessons should be televised. The other group, about 36.4 percent of teacher respondents supported non-televised method of teaching. The rest 13.6 percent of teacher respondents were unable to decide on the issue. This implies that both teacher and student respondents are not predominantly supporting televised teaching-learning. Specially student respondents are clearly opposing televised teaching learning for its unsuitable methodology and approach.

3.13 Televised Subject Preference of Students

Table 21 - Televised Subject Preference of Student Respondents

Subjects	Respondents		Rank order
	No	%	
Physics	39	8.56	6
Mathematics	91	24.33	2
Biology	58	15.50	3
Chemistry	107	28.61	1
English	47	12.57	4
Civic Education	32	10.43	5
Total	374	100	

Student respondents were asked to indicate the televised subjects they liked best and dislike most, and give the reasons for their ranking. As indicated in Table 21, the great majority of the student respondents have preferred learning chemistry through plasma TV to other subjects. This is affirmed by about 28.61 percent of student respondents. Among the reasons given by the student respondents to prefer chemistry is usefulness of teaching aids. In other words, laboratory experiments shown by TV teacher during the televised learning of chemistry subject made them (student respondents) more interested in chemistry as compared to other subjects (lessons).

On the other hand, Civic and Ethnical education is the least preferred by the student respondents. According to the opinions of the majority of the student respondents besides other limitations civic education transmission through PTV did not attract them.

3.14 Overall Respondents' Attitude towards Using Plasma TV for Instruction

For the sake of convenience, in order to see the distribution of the respondents under the three categories, the five point scale values (strongly agree, agree, undecided, disagree, and strongly disagree) are categorized into favorable, undecided, and unfavorable attitude towards using PTV for instruction.

Table 22 - Attitudes towards using Plasma TV for Instruction

Choice items	Respondents			
	Teachers		Students	
	No	%	No	%
Favorable	30	45.5	167	44.7
Undecided	9	13.6	33	8.8
Unfavorable	27	40.9	174	46.5
Total	66	100	374	100

As the distribution in Table 22 reveals, among the total teacher respondents about 45.5 percent have shown a favorable (positive) reaction, while 13.6 percent and 40.9 percent were unable to decide and have shown unfavorable opinion in using PTV for instruction respectively. That is, the percentage of teacher respondents who favored using PTV for instruction is greater than those who have unfavorable opinion. But a closer look into the distribution of teacher respondents indicates that about 54.5 percent of teacher respondents were not included in the category of favoring using PTV for instruction. That is to say, teacher respondents those favoring PTV for instruction are less than half of the total teacher respondents. The chi-square test for the significance of proportional difference between the favorable and unfavorable groups was found to be non significant in the degree of freedom one at $P < 0.05$ confidence level. In other wards, the calculated chi-square value ($\chi^2=0.15$) is less than the critical value (3.48). Therefore, according to this statistical implication the teacher respondents are not significantly favoring using PTV for instruction.

With regard to the overall student respondents' attitude towards using plasma TV for instruction, as the distribution in Table 22 indicates, about 46.5 percent of the student respondents have shown unfavorable (negative) reaction. On the other hand, about 44.7 percent of student respondents have shown positive attitude towards using PTV for instruction. The rest 8.8 percent of students respondents neither favored nor unfavored using PTV for instruction.

The percentage of student respondents disfavoring using PTV for instruction is slightly greater than the percentage of student respondents who are favoring using plasma TV for instruction. But, when the chi-square test for the significance of proportional difference between the favorable and unfavorable groups was calculated it was found to be non significant at $P < 0.05$ confidence level in the degree of freedom one. That is, the calculated chi-square value ($\chi^2=0.14$) is less than the table value (3.481).

In the case of teacher respondents the percentage of the group favoring using PTV for instruction was slightly greater than the percentage of disfavoring group, whereas in the case of student respondents the issue is reversed. However, in both cases (teachers and students) the significance of proportional difference between favoring and unfavorable groups was found to be non significant at the 0.05 level.

3.15 Attitudinal Difference between Male and Female Respondents towards Using Plasma TV for Instruction

Table 23 - Distribution of Respondents by Gender into Favorable, Undecided and Unfavorable Attitudes towards Using PTV for Instruction

Respondents	Sex	Responses							
		Favorable		Undecided		Unfavorable		Total	
		No	%	No	%	No	%	No	%
Teachers	Male	26	45.6	8	14.0	23	40.4	57	100
	Female	4	44.5	1	11.0	4	44.5	9	100
	Total	30	45.5	9	13.6	27	40.9	66	100
Students	Male	85	44.3	16	8.3	91	47.4	192	100
	Female	82	45.1	17	9.3	83	45.6	182	100
	Total	167	44.7	33	8.8	174	46.5	374	100

It is evident from Table 23 that the distribution of male teacher respondents those favoring using PTV for instruction is slightly greater than disfavoring group. Specifically, about 45.6 percent of male teacher respondents have positive attitude towards using PTV for instruction, whereas 40.4

percent tended to disfavor using PTV for instruction. The rest about 14 percent of male teacher respondents were unable to decide on the issue.

In the case of female teacher respondents, as can be observed from Table 23, those favoring and disfavoring using PTV for instruction are equally distributed. That is, one group of 44.5 percent of female teacher respondents favored using PTV for instruction whereas another group of 44.5 percent of female teacher respondents disfavored using PTV for instruction. The rest 11 percent of female teacher respondents were unable to decide on the matter.

The distribution of teacher respondents in terms of sex, regarding using PTV for instruction, reveals non significant attitudinal difference. Neither male nor female teacher respondents are predominantly neither favoring nor disfavoring using PTV for instruction. In general the calculated chi-square value ($\chi^2 = 0.07$) is less than the critical value (5.99) at the 0.05 level in the degree of freedom 2.

With regard to the student respondents, as indicated in Table 23, about 47.4 percent of the male student respondents have shown negative attitude towards using plasma television for instruction. On the other hand, 44.3 percent of male student respondents have shown positive attitude towards using PTV for instruction. The rest 8.3 percent of male student respondents were not able to decide.

In the case of female student respondents, their distribution into favorable and unfavorable attitude towards using PTV for instruction appears fair. About 45.6 percent of female student respondents have shown negative attitude toward using PTV for instruction whereas about 45.1 percent have positive attitude. The rest 9.3 percent of female student respondents were unable to decide on the issue.

In both (male and female student respondent) cases the number (percentage) of respondents disfavoring using PTV for instruction is slightly greater than the percentage of those favoring the situation. But the chi-square test for significance of proportional difference between male and female student respondents was found to be non significant at the 0.05 level. In other words, the calculated chi square value ($\chi^2 = 0.18$) is less than the table value (5.99) at the 0.05 level in the degree of freedom two ($df = 2$). Therefore, this suggests that the respondents sex variation in the sampled schools is not a significant factor in their attitude difference towards using PTV for instruction.

3.16 Respondents Attitudinal Difference by School towards Using PTV for Instruction

Table 24 – Respondents Attitudinal Difference by School

Respondents	School	Responses							
		Favorable		Undecided		Unfavorable		Total	
		No	%	No	%	No	%	No	%
Teachers	Fasilo G.S.S	6	54.5	1	9.1	4	36.4	11	100
	Ghion G.S.S	10	50.0	3	15.0	7	35.0	20	100
	Tana Haik G.S.S	14	40.0	5	14.3	16	45.7	35	100
	Total	30	45.5	9	13.6	27	40.9	66	100
Students	Fasilo	19	42.2	4	8.9	22	48.9	45	100
	Ghion	39	48.8	5	6.2	36	45.0	80	100
	Tana	109	43.8	24	9.6	116	46.6	249	100
	Total	167	44.7	33	8.8	174	46.5	374	100

As can be observed from Table 24, the majority of teacher respondents of Fasilo General Secondary School have shown favorable reaction (positive attitude) towards using PTV for instruction. This is affirmed by about 54.5 percent of the respondents. Teacher respondents of Fasilo General Secondary School who have negative attitude towards using PTV for instruction are about 36.4 percent.

In the case of Ghion General Secondary School, it is evident from Table 24 that 50 percent of teacher respondents have shown positive attitude towards using PTV for instruction. In contrast, 35 percent of teacher respondents of this school didn't show favorable attitude towards using PTV for instruction. The rest 15 percent of teacher respondents of the school were unable to decide on the issue.

Unlike the teacher respondents of Fasilo and Ghion Secondary Schools, the majority of Tana Haik General Secondary School teacher respondents have shown negative attitude towards using PTV for instruction. As indicated in Table 24, about 45.7 percent of the teacher respondents of the school have shown negative attitude towards using PTV for instruction, whereas 40 percent of the

respondents favored using PTV for instruction. The rest 14.3 percent of teacher respondents of this school were unable to decide on the issue.

A non significant difference towards using PTV for instruction was observed among teacher respondent groups by school (from school to school). That is to say, the chi-square test for the significance of difference towards using PTV for instruction among teacher groups from sampled school to school was found to be non-significant at the 0.05 level because the computed chi-square value ($\chi^2=1.16$) is less than the table value (9.49) at the 0.05 level in the $df = 4$. Therefore, this suggests that the teacher respondents' school variation in the sampled schools is not a significant factor in their attitude towards using PTV for instruction.

With regard to student respondents, as can be seen from Table 24, about 48.9 percent of Fasilo General Secondary School student respondents have shown negative attitude towards using PTV for instruction.

In contrast, about 42.2 percent of the student respondents of the school have shown positive attitude towards using PTV for instruction. This implies that the majority of student respondents of Fasilo General Secondary School have negative attitude towards using PTV for instruction.

The responses of Ghion General Secondary School student respondents, have shown the opposite of the responses of Fasilo General Secondary School student respondents. In the case of Ghion General Secondary School student respondents, the majority (48.8 percent) of students respondents have shown positive attitude towards using PTV for instruction, whereas 45 percent of the student respondents have shown negative attitude. Therefore, this is an indication that students in Ghion General Secondary School, though not predominantly, have positive attitude towards using plasma television for instruction.

The majority of the student respondents from Tana Haik General Secondary School, as can be observed from Table 24, have shown negative attitude towards using PTV for instruction. This is affirmed by about 46.6 percent of student respondents. On the other hand, about 43.8 percent of student respondents of Tana Haik General Secondary School have shown positive attitude towards using PTV for instruction. The rest 9.6 percent of the student respondents of the school are unable to decide on the issue.

A non-significant difference towards using PTV for instruction was observed among student respondent groups from school to school. In other words, the chi-square test for the significance of difference towards using PTV for instruction among student groups from sampled school to school

was found to be non-significant at the 0.05 level, because the calculated chi-square value ($\chi^2=1.28$) is less than critical or table value (9.49) at the 0.05 level in the $df=4$. Therefore, this indicates that the student respondents school variation in the sampled schools is not a significant factor in their attitude towards using PTV for instruction.

Table 25 - Student Respondents Attitudinal Difference by Access to TV At Home towards Using PTV for Instruction

Respondents		Responses							
		Favorable		Undecided		Unfavorable		Total	
		No	%	No	%	No	%	No	%
Access to TV at home	Have	84	45.4	16	8.7	85	45.9	85	49.5
	Have not	83	43.9	17	9.0	89	47.1	189	50.5
	Total	167	44.7	33	8.8	174	46.5	374	100

$\chi^2 = 0.08$, $P(2, 0.05) = 5.99$ non significant

Statistically a non-significant difference in attitude towards using PTV for instruction was observed among the student respondents who have and have not access to TV at their own home. As indicated in Table 25 above about 47.1 percent of the student respondents who have no access to TV at their own home have shown negative attitude towards using PTV for instruction. But in the case of student respondents who have TV at their own home, about 45.9 percent have shown negative attitude towards using PTV for instruction.

About 45.4 percent and 43.9 percent of student respondents favored PTV for instruction from those who have and have not access to TV at their own home respectively. In general the responses depicted that both of the groups are tended to evaluate using PTV for instruction unfavorably. And the chi-square test for the statistically significant of difference between the groups was found to be non significant at the 0.05 level. This suggests that the respondents' access to TV at their own home in this context is not a significant factor in their positive/negative attitude towards using PTV for instruction.

Table 26 – Teacher Respondents Attitudinal Difference by: Age, Work Experience and Qualification

Respondents	School	Responses							
		Favorable		Undecided		Unfavorable		Total	
		No	%	No	%	No	%	No	%
Age group	20 – 30	10	47.6	2	9.5	9	42.9	21	100
	31 – 40	7	43.8	3	18.8	6	37.4	16	100
	41 – 50	11	45.8	3	12.5	10	41.7	24	100
	Above 50	2	40.0	1	20.0	2	40.0	5	100
	Total	30	45.5	9	13.6	27	40.9	66	100
Work Experience Group	0 – 10	7	46.7	2	13.3	6	40.0	15	100
	11 – 20	8	42.1	3	15.8	8	42.1	19	100
	21 – 30	11	44.0	3	12.0	11	44.0	25	100
	Above 30	4	57.1	1	14.3	2	28.6	7	100
	Total	30	45.5	9	13.6	27	40.9	66	100
Qualification	12 + 2	1	100	-	-	-	-	1	100
	12 + 3	2	40.0	1	20.0	2	40.0	5	100
	1 st degree	27	45	8	13.3	25	41.7	60	100
	Total	30	45.5	9	13.6	27	40.9	66	100

The attitudes of teacher respondents, varies by age, work experience and qualification. As indicated in Table 26, no significant difference in using PTV for instruction was observed in all categories of teacher respondents.

The calculated chi square value (for each category) is less than the critical value. That is

- The calculated chi-square value for age group category ($x^2 = 0.87$) is less than the critical value (12.59) at 6 degree of freedom i.e. $x^2 = 0.87$, $P(6, 0.05) = 12.59$
- The calculated chi square value for work experience category ($x^2 = 0.07$) is less than the critical value (12.59) at 6 degree of freedom,
i.e. $X^2 = 0.07$, $P(6, 0.05) = 12.59$
- The calculated chi square value for qualification category ($x^2 = 0.93$) is less than the critical value (9.49) at 4 degree of freedom, i.e. $x^2 = 0.93$, $P(4, 0.05) = 9.49$. Therefore, this implies that the teacher respondents examined background characteristics (age, work experience and qualification) in this context are not significant factors in their attitude towards using PTV for instruction.

CHAPTER IV

Summary, Conclusion and Recommendations

This chapter deals with the highlights of the study, conclusion derived from the findings, and recommendations made on the basis of the conclusions.

4.1 Summary

The main purpose of this study was the identification of the attitudes of teachers and students towards using plasma television for instruction in the general secondary schools of Bahir Dar special zone. In doing so, the study has attempted to find answers for the following basic questions:

1. What is the teachers' attitude towards using PTV for instruction?
2. What is the students attitude towards using PTV for instruction?
3. Is there significant attitudinal difference towards using PTV for instruction between male and female teachers?
4. Is there significant attitudinal difference towards using PTV for instruction between male and female students?
5. Is there significant attitudinal difference of teachers towards using PTV for instruction from school to school?
6. Is there significant attitudinal difference of students towards using PTV for instruction from school to school?

In order to deal with these basic questions: change and innovation in education, media in education, some issues on attitude and learning, language limitations on learning through PTV, expected roles of televised lesson CRTs and students and supports needed for televised teaching learning processes are dealt in the review of related literature.

Concerning the data gathering as indicated in chapter one of this study, two sets of questionnaires were prepared and distributed. One set was for teacher respondents and the other set was for student respondents. These questionnaires were filled by respective respondents and returned. Zone education office head and school principals were interviewed. All the data gathered were presented and analyzed. To analyze the gathered data mainly percentage and chi square

statistical methods are implemented. From these gathered, analyzed and interpreted data, the following important findings of the study are identified.

1. The mode of presentation of TV teachers is found to be unsuitable because of its fastest pace/speed and incompatible usage of medium of instruction (English language) to the students. This was confirmed by the majority of student respondents.
2. Most students believed that televised lesson classroom teachers were not interested in the profession.
3. Majority of the respondents perceived televised teaching to be non-participatory.
4. Most teachers and students believed that televised teaching learning would develop students' listening skills.
5. Many teachers reported that students were not motivated in televised lessons.
6. Most teachers believe that televised teaching narrows existing gap among schools.
7. Time allotted to the classroom teachers was found to be insufficient. This was affirmed by the responses of 51.5 percent teachers and 53.7 percent of student respondents respectively.
8. Students' textbooks, teacher's guide and support materials were not adequately found in the sampled schools.
9. There was no students' guidance and counseling service in all sampled schools.
10. About 54.5 percent teacher respondents reported that they had difficulties in televised classes to assist slow learners.
11. The great majority (about 86 percent) of televised lesson classroom teachers were not oriented /trained in the utilization of ITV in the classroom.
12. Most teachers and students confirmed that televised teaching does not take into account individual differences of learners/students.
13. Many teachers believe that televised teaching would improve teaching methodology.
14. Many respondents reported that the interruption of PTV transmission from the source and due to electric power supply was found to be hindrance for PTV teaching learning.
15. Most teachers and students do not believe in non-televised lessons to be televised.
16. To some extent, programs transmitted were found to be not in line with available teaching materials.
17. Many televised lesson classroom teachers believed that televised classes were found to be difficult to manage.

18. Most students believe that televised teaching to be beyond their capacity.
19. Many respondents believed that the interaction between classroom teachers and students to be reduced as a result of PTV transmission.
20. Televised teaching was not given pertinent attention by the school community.
21. Televised lesson support materials were not found adequately in the sampled schools. About 73 percent of teacher respondents affirmed the prevalence of this problem.
22. As far as televised teaching is concerned, the relation between schools and zone education office was loose.
23. Out of total teacher respondents about 45.5 percent had positive attitude towards using PTV for instruction.
24. Out of total student respondents about 44.7 percent had positive attitude towards using PTV for instruction.
25. The attitudinal difference towards using PTV for instruction between male and female respondents (both teachers and students) is found to be statistically non-significant.
26. The attitudinal difference towards using PTV for instruction among respondents from school to school is found to be statistically non-significant.

4.2. Conclusions

Based on the findings summarized above the following conclusions are drawn;

1. The attitude of respondents of both teachers and students towards using PTV for instruction is mixed and obscured. Neither positive nor negative attitudes of the respondents towards using PTV for instruction is statistically significant. What is clearly indicated in the findings of the study is that the majority of the respondents have no positive attitudes towards using PTV for instruction. In other words, the majority of respondents who have no positive attitude towards using PTV for instruction are in the category of those who have negative attitude and unable to decide on the issues. Thus, it can be concluded that televised teaching learning process in the sampled schools at present needs detailed investigations.
2. Plasma television is a technical facility which cannot be effective by itself in the classroom instruction, it has to be at the service of the teacher supporting him to make teaching learning live. This becomes possible when the pertinent due attention is given to CRTs and

- the teachers and students possess positive attitude towards using PTV for instruction through orientation/training. But in the sampled schools, the overwhelming majority of televised lesson CRTs are not oriented/trained about the utilization of PTV in the classroom. Such negligence of the role of the CRTs to enhance students' learning could develop feeling of insecurity and dissatisfaction on the part of the CRTs and as a result negative attitude has developed towards using PTV for instruction.
3. The mode of presentation of TV teacher in its pace/speed, usage of language of instructional medium (English language) and clarity of the explanation is found to be incompatible with the standard/capacity of sampled school students respondents. Such incompatible approach of televised teaching learning system might initiate the learners (students) to develop negative attitude towards using PTV for instruction.
 4. Provision of needed supports, with no doubt enhances teaching learning process and as a result improves quality of education. In the case of sampled schools, the provision of needed supports, such as support materials, supervisory and the like to facilitate televised teaching learning process are not adequately given by concerned bodies. The relation between schools and zone education office is loose. Televised teaching is disregarded by the school community.
 5. Televised lessons are produced and transmitted in series that every previous lesson is expected to be base for the next one. As a result if one transmission is missed due to some reasons in some of the schools only, obviously the next lesson is partially lost. The findings of the present study indicated that the sampled schools suffered from electric power supply interruption during PTV transmission. Of course, the CRTs are expected to bridge the gaps. But as the findings (responses of students) indicated, most of the CRTs of the sampled schools are not carrying out the duty, perhaps due to their being dissatisfied with their reduced role in the live teaching learning process. Insufficient time allotment to the CRTs of televised lessons and inadequate attention given to them is also attributed for the negative attitude development of televised lesson CRTs towards using PTV for instruction.
 6. Guidance and counseling plays significant role in shaping attitudes. But in sampled schools no guidance and counseling service is provided at all, to the students about newly incorporated PTV. In most cases new technology might be resisted unknowingly. Thus, it can be concluded that the absence of students' guidance and counseling service in the

schools has contributed to the development of negative attitude of students towards using newly introduced technology/PTV for instruction.

7. Most factors that affect the respondents' attitude towards using PTV for instruction in the sampled schools are interrelated, the existence of one problem is cause for another. For instance, insufficient time allotted to CRT reduces the interaction of students with their CRT. Therefore, solving one attitudinal problem might lead to the solution of another problem.

4.3 Recommendations

The following recommendations are forwarded in light of the above findings and conclusions:

1. The mode of presentation of TV teachers is found to be the very problem of televised teaching learning. Therefore, to minimize the problem:
 - The fastest pace/speed of TVTs has to be reduced so that learners can cope with, understand and take short notes from TV screen.
 - The English language as the medium of instruction used by TVTs should be simple and easily understandable to the students.
 - TVTs should be Ethiopian so as to reduce the problem of accent/pronunciation/
2. Training is essential means to change attitude of teachers and improve their skills. Therefore, there must be an intensive training/orienting of teachers in the utilization of televised lessons. The training programs can be arranged in the form of panel discussion, workshops or seminars. Doubts and fears of implementers/teachers can be removed during the discussion.
3. The zone education office should strengthen attachment and follow up with the schools and provide needed supports such as support materials and supervisory to facilitate televised teaching learning process.
4. It is found that time allotted to the CRTs is insufficient to revise a lesson. On the other hand, teachers and students demand more time to the CRTs. Therefore, to make teaching learning participatory, PTV transmission should be supportive to the CRT. i.e. more time to the CRT and less time to the TVT should be allotted. Otherwise, the existing time allotment is making the learners (students) passive in the class, no interaction with their CRTs due to time constraint and students are left with their confusion.

5. Electric power supply frequent interruption, during PTV transmission, is found to be one of the problems of sampled schools of the study. In addition to the teachers' role of bridging (filling) the gap, recorded video cassettes of the PTV transmission should be made available at the school level so as not to miss transmission totally i.e. students should be given an opportunity of viewing missed transmission.
6. The zone education office should conduct frequent workshops regarding merits and demerits of learning through PTV for students and their parents.
7. There should be guidance and counseling service to students in every general secondary school.
8. Further nation wide detailed study has to be conducted on the issue.

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Appendix – A

Addis Ababa University
Post Graduate Program
College of Education
Department of Educational Planning and Management.

Questionnaire to Be Filled By Teachers

Dear Teacher:

The Purpose of this questionnaire is to gather data on the attitudes of teachers towards using plasma television for instruction. As a respondent to this questionnaire, your genuine reply contributes greatly toward achieving the objective of the investigation. Thus, I kindly request you to give the required information based on your experience of using plasma television for instruction. Your response will be treated as the group data and kept confidential. No need of writing your name.

Thank you in advance
The researcher

Part I. Background Information

Please respond by putting a tick mark (√) in the box or filling with appropriate responses in the blanks.

1. Name of your school _____
2. Sex: A. Male B. Female
3. Age in years: A. Below 20
 B. 20-30
 C. 31-40
 D. 41-50
 E. > 50
4. Total teaching experiences (in years)
A. 0-10
B. 11-20
C. 21-30
D. > 30

5. Teaching experience/s of televised lessons (in years)

- A. 0 – 1
 B. 2
 C. ≥ 3

6. Level of education/Qualification

- A. 12+1 D. B.A/B.SC
 B. 12+2 E. M.A/M.SC
 C. 12+3 F. Others _____

Part II. Statements on Attitude

Instruction: Each of the statements in the table below expresses an attitude towards using plasma television for instruction. Please indicate your degree of agreement or disagreement to each item by putting a tick mark (✓) with respect to each statement.

Remember SA= strongly Agree, A= Agree, U= Undecided, D= Disagree, SD= Strongly Disagree)

Statements regarding televised teaching

No	Statements/Items	Rating scales				
		S A	A	U	D	S D
1	Teaching of televised lesson made me more interested in the profession ✓					
2	Televised teaching is not applicable to the schools of our country ✓					
3	I feel that teaching through plasma TV to be waste of resources ✓					
4	I recommend that non-televised lessons should be televised ✓					
5	I have difficulties with televised teaching to manage class ✓					
6	I have difficulties with televised teaching to assist slow learners ✓					
7	Televised teaching lessens the importance of classroom teacher ✓					
8	Televised teaching helps me to improve my teaching methodology ✓					
9	Televised teaching narrows the gap created among schools (by supplying uniform education) ✓					
10	Televised teaching improves quality of education					
11	Many of the students are showing progress due to televised learning					
12	Students understand easily and clearly the explanations of TV teacher					
13	Students have difficulties with televised teaching in taking notes from TV screen					
14	Televised teaching makes students passive in a class					
15	Students can best learn without instructional TV					
16	Televised lesson students do not pay attention to the instruction of classroom teacher					
17	I found that televised teaching helps students develop listening skills					
18	TV teacher stimulates students' learning interest					
19	TV teacher emphasizes on what is known and obvious to the students					
20	TV teacher uses easily understandable language for instructions					
21	Topics that are not sufficiently presented on text-books are enriched by TV teacher					
22	Teachers of televised lessons will have good opportunity to learn better teaching techniques from TV teacher					
23	Time allotted to the classroom teacher for the revision of one lesson is sufficient					
24	The students' textbooks, teacher's guide and the plasma transmission are related to the extent of its importance					
25	I have received sufficient training related to the utilization of instructional TV programs.					
26	There are sufficient TV lesson manuals and support materials in our school					

Part III. Open-ended Questions

1. What assistance do you expect from different authorities, parents and others?
a. from school principals

b. from zone education office

c. from community members

d. from others

2. How do you rate the supports provided by the school director to facilitate televised teaching?

3. How do you rate the supports provided by zone education office to facilitate televised teaching?

4. How frequent have you encountered the problems of electric power fluctuation/interruption during televised teaching? How did you solve it?

5. What are the major obstacles for the proper implementation of plasma TV for instruction?

6. Do you think that televised teaching would help to enhance quality of education? How?

7. What solutions would you propose (suggest) for the better implementation of plasma TV for instruction?

8. Would comment on the overall program of plasma TV?

Thank you again!

Appendix – B

አዲስ አበባ ዩኒቨርሲቲ የድህረ ምረቃ መርሃ ግብር የስነ-ትምህርት ኮሌጅ የትምህርት ዕቅድና ስራ አመራር ትምህርት ክፍል

በተማሪዎች የሚሞላ መጠይቅ

ውድ ተማሪዎች:-

የዚህ መጠይቅ ዓላማ ተማሪዎች በጥላዘማ ቴሌቪዥን ስለሚሰጠው ትምህርት ያላቸውን አስተያየት ሰብስቦ ጥናት ለማካሄድ ነው። በመሆኑም የጥናቱ አስተማማኝነትና ትክክለኛነት የሚወሰነው እናንተ ለእያንዳንዱ ጥያቄ በምትሰጡት ምላሽ ላይ ነው። ስለዚህ በጥንቃቄ ተገቢውን መልስ በመስጠት የበኩላችሁን አስተዋፅኦ እንድታደርጉ እየጠየቅሁ፤ ለመጠየቁ የምትሰጡት ምላሽ በሚሰጠር ተጠብቆ ለጥናቱ ውጤት ብቻ የሚውል ነውና በመጠይቁ ላይ ስም መፃፍ የማያስፈልግ መሆኑን እገልጻለሁ።

ለሚደረግልኝ ትብብር አመሰግናለሁ።
አጥኚው /የድህረ ምረቃ ተማሪ/

ክፍል ስንድ:- ግላዊ መረጃ

ከተራ ቁጥር 1-4 ለተጠቀሱት የግላዊ መረጃ ጥያቄዎች በባዶ ቦታ በመሙላትና የራይት /N/ ምልክት በተገቢው ሳጥን ውስጥ በማስቀመጥ መልስ/ሽ።

1. የትምህርት ቤትህ/ሽ ስም _____
2. ዕድሜህ/ሽ በዓመት:- ከ 14 በታች ከ 14-18 ከ 18 በላይ
3. ፆታ: ወንድ ሴት
4. ከቤታችሁ ቴሌቪዥን አለ? ሀ/አዎ ለ/የለም

ክፍል ሁለት:- የአመለካከት ዐረፍተ ነገሮች

መመሪያ:- ከዚህ ቀጥሎ በቴሌቪዥን ስለመማር፣ ስለቴሌቪዥን መምህር/ት ስለየክፍል ውስጥ መምህር/ትና በቴሌቪዥን ለመማር ስላሉት የሁኔታዎች መመቻቸት ወይም ያለመመቻቸት ከሰንጠረዥ ውስጥ ያሉትን ዐረፍተ ነገሮች በጥሞና በማንበብ ከተሰጡት አማራጮች መካከል በይበልጥ የራስህን/ሽን አመለካከት ይገልጻል ብለህ/ሽ በምታስበው/ቢው ላይ «የራይት ምልክት» /N/ በማስቀመጥ መልስ/ሽ።

2. ለደረጃ አሰጣጥህ/ሽ ምክንያትህ/ሽ ምንድነው?

3. ትምህርት በቴሌቪዥን ክፍለ ጊዜ ውስጥ የምታከናውኑአቸው ተግባራት ምንድን ናቸው? ይገለጹ?

4. በቴሌቪዥን መማር ያግዘኛል ብለህ/ሽ ታስባለህ/ሽ? እንዴት? ይዘርዘር።

5. ትምህርት በቴሌቪዥን በመማርህ ያጋጠሙህና ያጋጥሙኛል ብለህ/ሽ የምትፈራቸው ችግሮች አሉህን/አሉሽን? ይዘርዘሩ።

6. በጥላዘማ ቴሌቪዥን መማርን በአግባቡ ለመተግበር ዋና ዋና መሰናክሎች /ችግሮች/ ምንድናቸው?

7. ትምህርት በጥላዘማ ቴሌቪዥን በአግባቡ ለማስኬድ ምን ምን ነገሮች መሻሻል ይኖርባቸዋል?

8. ስለ ጥላዘማ ቴሌቪዥን ፕሮግራም አጠቃላይ አስተያየት ካለህ ስጥ/ስጭ።

በድጋሚ አመሰግናለሁ።

Appendix - C

Addis Ababa University

Post Graduate Program

College of Education

Department of Educational Planning and Management.

Interview Guides: to school principals and zone education head.

1. Are there sections that have no plasma TV? If yes, why?
2. If plasma TV stops working due to power supply interruption or some other cases, what measures would you take?
3. What do you say about the contribution of plasma TV for the teachers, students, and quality of education?
4. Would you mention the support materials, of teaching through plasma TV, that you have provided to the user teachers? Do you think that the support is adequate? If not adequate, what do you say about it?
5. Are televised lesson teachers given sufficient orientation or workshop about the utilization of plasma TV for instruction?
6. How do you see the attitudes of teachers and students towards using plasma TV for instruction? Is it generally positive or negative?
7. What are the major constraints that you have faced while supervising and coordinating the implementation of plasma TV for instruction?
8. What do you suggest for the better implementation of plasma TV for instruction?
9. Would you comment on overall program of using plasma TV for instruction?

Appendix - D

Addis Ababa University
Post Graduate Program
College of Education
Department of Educational Planning and Management.

Questionnaire to Be Filled By Students

Dear Student:

The Purpose of this questionnaire is to gather data on the attitudes of students towards using plasma television for instruction. As a respondent to this questionnaire, your genuine reply contributes greatly toward achieving the objective of the investigation. Thus, I kindly request you to give the required information based on your experience of learning through plasma television. Your response will be treated as the group data and kept confidential. No need to writing your name.

Thank you in advance
The researcher

Part I. Background information of Respondents

1. Name of your School _____
2. Age in years: Below 14
 14-18
 Above 18
3. Sex: Male
 Female
4. Is there TV at your home? a) Yes b) No

Part II. Statements on Attitude

Instruction: Each of the statements in the table below expresses an attitude towards using plasma television for instruction. Please indicate your degree of agreement or disagreement to each item by putting a tick mark (√) with respect to each statement

Remember SA= Strongly Agree, A= Agree, U= Uncertain, D= Disagree,
SD= Strongly Disagree)

No	Statements/Items	Rating scales				
		SA	A	U	D	SD
1	I do not like televised learning because it makes me passive in the classroom					
2	I do not like televised learning because it is beyond the reach of my standard					
3	I do not like televised learning because it does not take into account individual differences.					
4	Televised learning stimulates my learning interest					
5	I found learning through plasma TV to be waste of time					
6	I found learning through plasma TV to be indispensable					
7	I wish non-televised lessons to be televised					
8	In general televised classes are boring to me					
9	I like televised learning because it helps me develop listening skills					
10	I like televised learning because TV teacher uses understandable (Soft) language					
11	I like televised lesson because TV teacher can teach more than classroom teacher					
12	I like televised learning because TV teacher makes use of more teaching aids					
13	I found that TV teacher is too fast to take notes from TV screen					
14	The explanations of TV teacher has become clear to me					
15	Many of the classroom teachers of televised lessons are interested in teaching					
16	Many teachers of televised lessons do not show interest in their students					
17	Most of classroom teachers gave up their authority to the TV teacher					
18	I think, time allotted to TV teacher is excess as compared to time allotted to classroom teacher					
19	All my textbooks of televised lessons are in line with televised learning					
20	One of the difficulties of televised learning in our school is the interruption of power supply (electric power)					

Part III. Open-ended Questions

1. Televised lessons (subjects) are listed below. To which subjects do you think televised learning is the most applicable? Please indicate your rank order by putting numbers (1-6) in the spaces provided (i.e, 1 for the most applicable and ...6 for the least applicable)

- A. Physics _____ D. Civic and Ethical Education _____
 B. Biology _____ E. Chemistry _____
 C. English _____ F. Mathematics _____

2. What are the major reasons for your ranking order?

3. What are the activities that you have to do in televised classes?

_____ Do you think that televised learning would help you? How?

_____ Would you list the problems that you have encountered/and you fear to be encountered due to televised lessons?

4. What are the major obstacles for proper implementation of plasma TV for instruction?

5. What would say about things to be improved for the better implementations of plasma TV for instruction

6. Would you comment the over all programs of plasma TV?

Thank you again!

Appendix - E

Rate of Returns of Questionnaires

Ser. No.	Sample schools	Teachers		Students	
		Distributed	Collected	Distributed	Collected
		No.	No.	No.	No.
1.	Fasilo General Secondary School	13	11	48	45
2.	Ghion General Secondary School	24	20	88	80
3.	Tana Haik General Secondary School	38	35	304	249
Total		75	66	440	374

Appendix - F

Total number of grade ten teachers and students in the sampled schools

Ser. No.	Sample schools	Teachers			Students		
		Male	Female	Total	Male	Female	Total
1	Fasilo General Secondary School	12	1	13	239	194	433
2	Ghion General Secondary School	20	4	24	452	340	792
3	Tana Haik General Secondary School	33	5	38	1202	1257	2459
Total		65	10	75	1893	1791	3684

Declaration

This thesis is my original work and has not been presented for a degree in any other university, and that all sources of material used for the thesis have been duly acknowledged.

Name	Signature	Date
Getnet Akal		February 12, 2007

This thesis has been submitted for examination with my approval as university advisor.

Name	Signature	Date
Zenebe Baraki (PhD)		February 12, 2007

