

## Impact of Visual Aids in Enhancing the Learning Process Case Research: District Dera Ghazi Khan.

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### Abstract

This research explore the teachers opinions on the use of visual aids (e.g., pictures, animation videos, projectors and films) as a motivational tool in enhancing students' attention in reading literary texts. To accomplish the aim of the research, the closed ended questionnaire was used to collect the required data. The targeted population for this research was the staffs and students of the public and private educational institutions of District Dera Ghazi Khan. In this research the primary data was used for gathering information. The collected data is analyzed through the SPSS software and also data was represented in the percentage distribution of pie, line, and bar graphs. The analysis of the data indicated that the majority of the teachers and students had positive perceptions of the use of visual aids.

**Keywords:** Visual aids, resources, teacher trainings, student perceptions

### INTRODUCTION

Education is necessary for everybody. Education is very vital, deprived of education no can lead a good life. Teaching and learning are the important element in education. The teacher use different approaches and substantial to teach their students and their active learning. With the passage of time, altered methods and techniques are entered in the field of education and teacher use different kind of aids to make effective learning. Visual aids arouse the interest of learners and help the teachers to explain the concepts easily. Visual aids are those instructional aids which are used in the classroom to encourage students learning process. According to Burton "Visual aids are those sensory objects or images which initiate or stimulate and support learning". Kinder, S. James; describe visual aids as "Visual aids are any devices which can be used to make the learning experience more real, more accurate and more active".

Visual aids are tools that help to make an issue or lesson clearer or easier to understand and know (pictures, models, charts, maps, videos, slides, real objects etc.). There are many visual aids available these days. We may classify these aids as follows, visual aids are which use sense of vision are called Visual aids. For example :- models, actual objects, charts, pictures, maps, flannel board, flash cards, bulletin board, chalkboard, slides, overhead projector etc. Out of these black board and chalk are the commonest ones. The challenges of classroom instruction increases when prescribed a course to the class while course books (textbooks) are constituted with too many interactive expertise activities. Most significantly, it has convert a common phenomenon to integrate textbooks with audio visual aids as additional or supplementary resource for classroom course learning activities.

Visual aids are important in education system. Visual aids are those devices which are used in classrooms to encourage students learning process and make it easier and interesting. Visual aids are the best tool for making teaching effective and the best dissemination of knowledge.

Research of Cuban (2001) indicated the psychology of visual aids as under,

1% of what is learned is from the sense of TASTE, 1.5% of what is learned is from the sense of TOUCH, 3.5% of what is learned is from the logic of SMELL, 11% of what is educated is from the logic of HEARING and 83% of what is learned is from the sense of SIGHT.

Also people generally remember, 10% of what they READ, 20% of what they HEAR, 30% of what they SEE, 50% of what they HEAR and SEE, 70% of what they SAY and 90% of what they SAY as they DO a thing. So there is no doubt that technical devices have greater impact and dynamic informative system.

### Significance of the Research

Visual aids are the devices that help the teacher to clarify, establish, and correlate and co-ordinate precise conceptions, understandings and appreciations and support him to make learning more actual, active, motivating, encouraging, significant and glowing. Following are the significances of our research,

- ❖ Every individual has the tendency to forget. Proper use of visual aids helps to retain more concept permanently.
- ❖ Students can study well when they are inspired properly through different visual aids.
- ❖ Visual aids grow the accurate image when the students see and hear properly.
- ❖ Visual aids provide complete example for conceptual thinking.
- ❖ Visual aids create the environment of interest for the students.
- ❖ Visual aids helps to increase the vocabulary of the students.
- ❖ Visual aids helps the teacher to get sometime and make learning permanent.
- ❖ Visual aids provide direct experience to the students.

## **Aims of Research**

To explore the use and benefits of visual aids, in the students learning process in Dera Ghazi Khan.

## **Objectives of the Research**

Following are the main objectives of this research:

1. To investigate the teachers' views about the use of visual aids in schools, colleges and university classes of Dera Ghazi Khan.
2. To describe differences and similarities in use of visual aids among teachers.
3. To compare teachers' views regarding use of visual aids according to experiences, locations and gender.
4. To identify the uses of visual aids at school and university level.
5. To know the interest of students in visual aids at school and university level.
6. To analyze the effectiveness of visual aids in students learning process at school and university level.
7. To find out the problems in using visual aids.
8. To find out the teachers skills through visual aids which help to make learning process effective
9. To explore how the learners active in class room after the use of visual aids.
10. To investigate that visual aids help in making students good observer.

## **REVIEW OF LITERATURE**

Learning is a complex process. It can be defined as a change in disposition; a relatively permanent change in behavior over time and this is brought about partly by knowledge. Learning can happen as an outcome of afresh attained skills, principles, perception, knowledge, facts, and new information at hand (Adeyanju, 1997). Learning can be reinforced with different teaching/learning resources because they stimulate, motivate as well as focus learners' attention for a while during the instructional process.

Visual aids arouse the interest of learners and help the teachers to explain the concepts easily. Visual aids are those instructional aids which are used in the classroom to encourage teaching learning process. As Singh (2005) defines: "Any device which by sight and sound increase the individual s' practice, outside that attained through read labeled as an audio visual aids". Visual aids are those instructional devices which are used in the classroom to encourage learning and make it easier and motivating. The material like models, charts, film strip, projectors, radio, television, maps etc called instructional aids. (Rather, 2004). Visual aids are effective tool that "invest the past with an air of actuality." Visual aids distribute the learners with true knowledge, which detention their devotion and help in the understanding of the ancient marvels. They demand to the mind through the visual auditory senses. When we use visual aids as teaching aid, it is one of the aspects which root participation of students in the lesson because when students look at visual model or aid, it is measured as a kind of contribution.

Also the uses of visual aids encourage the body movement and it may strengthen the control. (Jain, 2004) There is famous Chinese proverb "one sighted is worth, a hundred words" it is fact that we take knowledge through our intellects. There is another maxim that "if we hear we forget, if we see we remember, and if we do something we know it" so it means that use of visual aids make teaching learning process more effective. As Kishore (2003) said "visual aids stimulated thinking and cognize." The use of visual aids in teaching learning process has multifarious values (Mohanty, 2001). Visual aids give chance to speakers to make a more professional and consistent performance. The teaching career is full with limitless opportunities to enrich the academic survives of students, while some ideas and educational goals will be easy for students to hold, other will need you to think productively to ensure that important learning aims are met. By visual aids in teaching is one mode to enhance lesson plans and give students additional ways to process subject information (Kunari, 2006). Visual aids are devices present unit of knowledge through auditory of visual stimuli both with a view to aid learning. They concretize the information to be obtainable and help in making learning practice apple real, active and vital. They supplement the work of the teacher and help in the research of the text books. The great educationist Comenius has well said: The foundation of all learning consists in representing clearly to the senses and sensible objects so they can be appreciated easily (Singh, 2005). (Agun et al; 1977) Examples of learning resources include visual aids, audio aids, real objects and many others. Visual aids are designated materials that may be locally made or commercially produced. They come in form of, for illustration, wall charts, exemplified pictures, symbolic materials and other two dimensional items. There are also audio visual aids. These are teaching machines like television, radio, and all kinds of projectors with sound attributes .Television and radio programs provide another useful learning resource. Films, likewise, are a general teaching/learning resource. In addition to helping students remember important information, teaching/learning resources have other returns. When accurately used they aid achievement and hold the attention of students. Visual aids can be very useful in supportive a topic, and the amalgamation of both visual and audio stimuli is particularly effective since the two most important senses are involved (Burrow, 1986). Teachers should keep in mind that they are like salesmen of philosophies, and many of the best sales practices that attract attention of potential clients are well worth considering. Clear y, a major goal of all teaching is for the students to be able to retain as much knowledge of the topic as possible, particularly the main points. Frequent studies have attempted to determine how well learning resources serve this purpose. Indicate from the studies vary greatly from modest results which show 10-15

percent increase in retention to more optimistic results in which retention is increased by as much as 80 percent (Burrow,1986). Good learning resources can help solve certain language barrier problem as they provide accurate visual image and make learning easier for the student (Chacko, 1981). Another use of learning resources is to clarify the relationship between material objects and concepts to understand. Symbols, graphs, and diagrams can also show associations of location, time, size, value and frequency. By symbolizing the factors tangled, it is even possible visualize abstract relationship. Instructional aides have no value in the learning process if they cannot be seen or heard. Tapes of speeches and sounds should be confirmed for correct volume and quality in the actual environment in which they will be used (Chorley, 1966). Visual aids must be visible to the whole class. All calligraphy and illustration must be large adequate to be seen easily by the students farthest from the aids'. Colours, when used, should provide clear contrast and easily be visible. The efficacy of aids can be enhanced by proper sequencing to build on former knowledge. Often, good institute and natural patterns of logic command the sequence.

According to Ranasinghe and Leisher (2009), integrating technology into the classroom begins when a teacher prepare lessons that use technology in meaningful and relevant ways. Technological aids should support the curriculum rather than dominate it. Ranasinghe and Leisher say that technology should assist the teacher in creating a collaborative learning environment. Koç (2005) says that the integration of technology into curriculum means using it as a tool to teach academic subjects and to promote higher-order thinking skills of the students. Developments in technology gave scope for innovative practices in the classroom. Practical improvements in the creation of visual aids for classroom use have been remarkable. Technological developments in Pakistan had a positive impact on students learning environment. Educational reforms for improving skills initiated by the Ministry of Higher Education elevated the classroom learning environment in Pakistan. University classrooms were equipped with world class technological teaching aids for making classroom students learning process interesting and resourceful. However, use of identical resources, comprising a syllabus, is suggested. Sequencing also can be improved purely by using overlays on slides, doffing methods on charts and or chalk, and marker boards. Sequencing can be emphasized and prepared clearer by the use of distinct colors (Chorley, 1966).

#### **Problem Statement of the Research**

As it is known that visual aids are one of the important teaching facilities and they are essential during teaching, they facilitate and make calm to study, teach and extant a theme easily. Visual aids may provide the chance to learn visually and are more effective and easy for human beings. During teaching with models and visual aids, students effort to identify it, or recognize its functions and try to have its interpretation, to understand its use. They compare it with their precepts, adapting the new sensation and pursuing to recognize about it. Hence, it is virtuous to stimulate the students or keep them active for eliciting in teaching and learning process. But, utmost of the teachers do not use adequate visual aids as teaching materials. This may cause barriers to teaching and learning process and directly affects the learning outcomes. So following are the main question of this research,

- What are the views of teachers about using visual aids?
- How differences between the level of students that use visual aids and without visual aids?
- Are there variances of views and use about visual aids between teachers and students in Dera Ghazi Khan?

#### **Limitation of the Research**

The researcher has to complete his research work within short period of time. Due to lack of resources he has to confine his research work to Dera Ghazi Khan District.

#### **Conceptual Framework**

A conceptual framework is defined as a network or a “plane” of associated models. Conceptual framework analysis offers a procedure of theorization for building conceptual frameworks based on grounded theory method.

The conceptual framework of the research is given as,

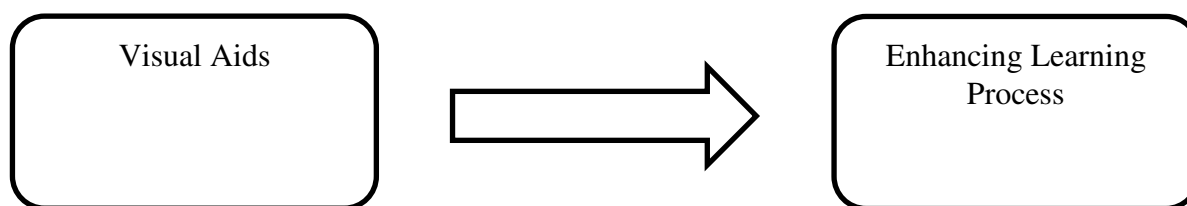


Figure-1 Conceptual framework of the research.

According to the conceptual framework the visual aids represents the independent variable while the enhancing learning process acts as dependent variable.

The model shows the factors that influenced in enhancing learning process.

Additive model is used here. The equation for the representation of the models is given as,

$$Y_i = \beta_0 + \beta_1 x_i + \epsilon_i$$

Here is,

$Y_i$  represents the dependent variable,  $\beta_0$  denotes the constant,  $\beta_1$  is a regression coefficient of independent variables,  $x_i$  represents the independent variables also called as explanatory variables and  $\epsilon_i$  denotes the random error.

So equation representing our conceptual framework is given as,

$$ELP = \beta_0 + \beta_1 (VAs)$$

Equation-1 represents the Additive model of the research.

Here is, (ELP) represents the dependent variable enhancing learning process and  $\beta_1$  (VAs) is independent variable and represents the visual aids.

### Hypothesis

Following is the main hypothesis that are generated from the conceptual framework,

**H<sub>1</sub>:** Visual aids have a positive and significance relation with enhancing the learning process.

### METHODOLOGY

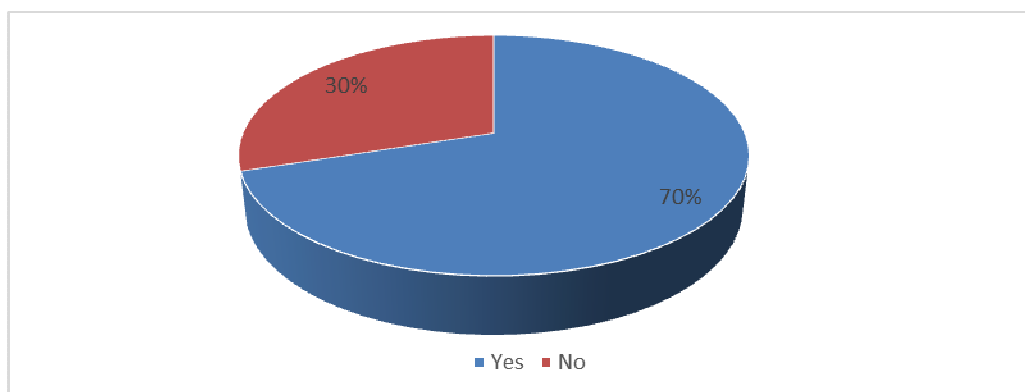
In this research random sampling techniques are used for the collection of information from the particular individuals that had the specific knowledge. So such type of knowledge have been required for the quantitative research. The targeted population for this research is the staffs and students of the Ghazi University Campus Dera Ghazi Khan, Indus International Institute Dera Ghazi Khan, Government Degree College Dera Ghazi Khan, Government High School No.1 (Center of Excellence) for boys and girls Dera Ghazi Khan, Government College of technology Dera Ghazi Khan, Government Technical Training Centre Dera Ghazi Khan, Vocational Training Institutes for boys and girls Dera Ghazi Khan, and private technical institutes of Dera Ghazi Khan. Sample size for this research is 200 and the primary data is used for gathering information. The closed ended questionnaires are used to measure various parameters which showed the impact of visual aids in enhancing the learning process of the students of Dera Ghazi Khan. The data is analyzed through the SPSS software using regression and correlation analysis.

### DATA ANALYSIS

The collected data is evaluated through the percentage distribution and is represented in the pie and line charts/ graphs.

### Motivation

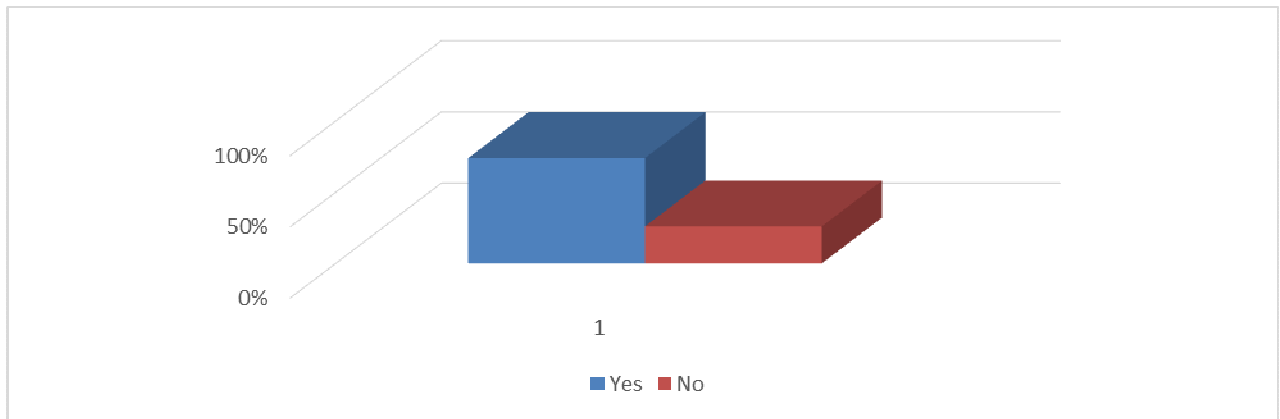
Visual aids helping in the motivation of teachers and students in Dera Ghazi Khan. The percentage distribution is given as,



The data analysis shows that 70% of the students and teachers agree that the visual aids help in motivation but 30% of students and teachers disagree in schools, colleges and university of Dera Ghazi Khan.

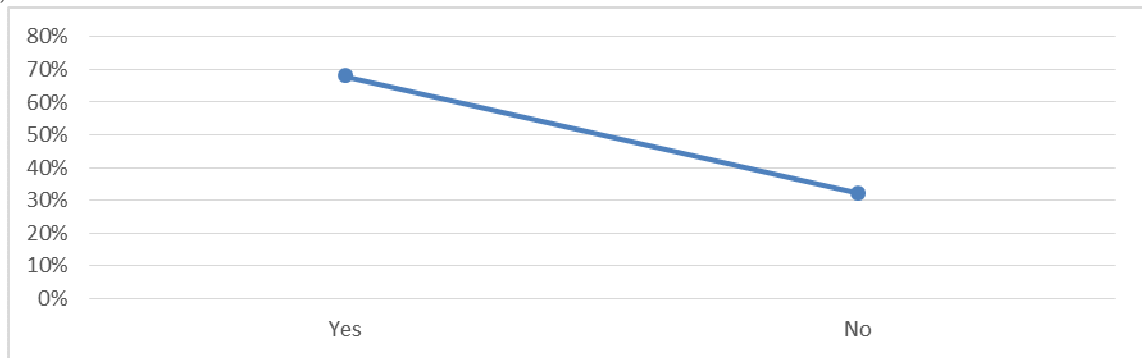
### Clarification

The data analysis shows that the 75% of the students and teachers agree that the visual aids help in clarification of contents under researching but 25% was disagree with this statement. The bar graph of its percentage distribution is given below.



**Increased the Vocabulary**

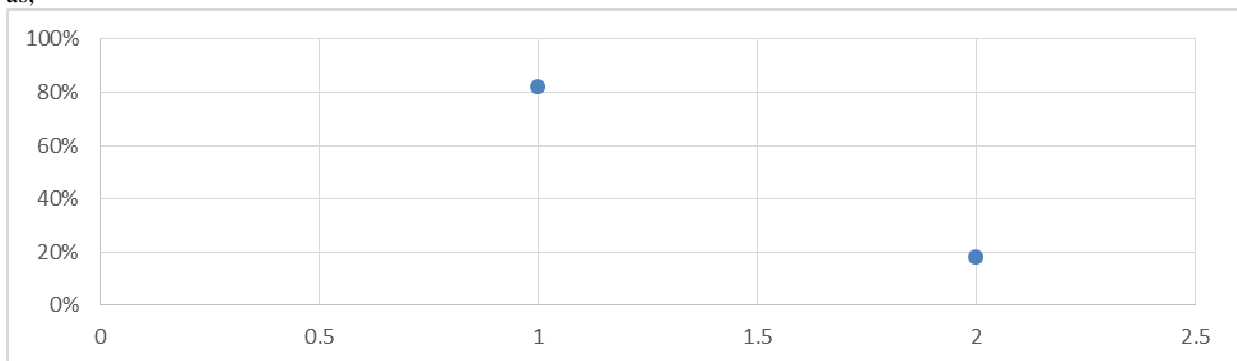
Increased the vocabulary is one of the independent variable that represents the role of visual aids. According to collected data 68% of the students and teacher agree that visual aids increase the vocabulary. The line graph is given as,



**Save the Time**

The visual aids help in the saving of teachers and students time in preparing of lessons.

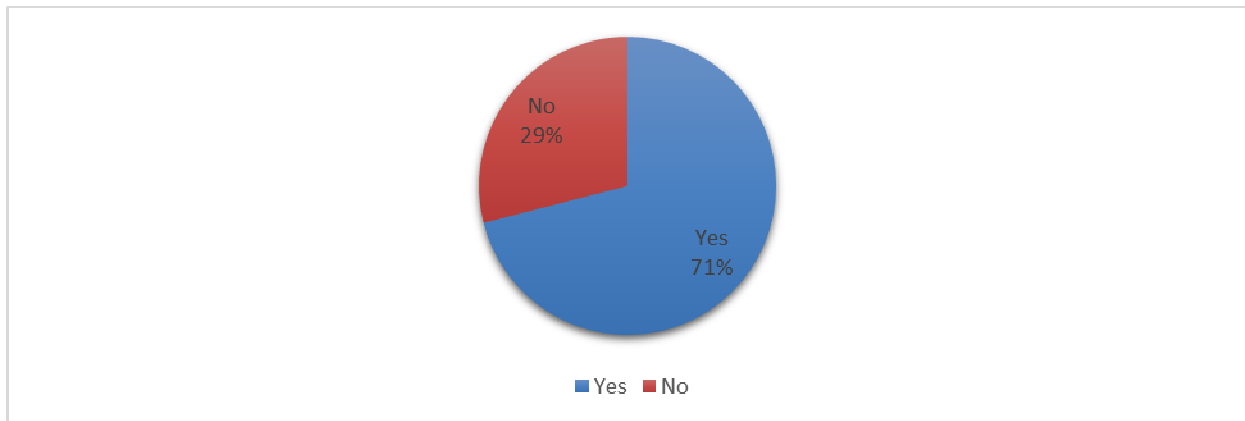
The percentage scattered diagram is given as,



The scattered shows that the 82% of the students and teachers agreed that visual aids save the time in preparing of lessons.

**Avoid Dullness**

The collected data shows that 71% of the teachers and students agree that visual aids avoid the dullness but 29% disagree with this statement. The pie chart of avoid dullness is given as,



### Direct Experience

According to collected data the 92% of the teachers and students agree that through visual aids the direct experience increased to observe the things while 18% disagree with this statement. The percentage distribution is given as,



The above data shows that the main variables that impact the enhancement of learning through visual aids in Dera Ghazi Khan.

### Model Summary

Model	R Square	Adjusted R Square	Std. Error of the Estimate
1	.785	.821	5.24651

Table-1 Model summary of the research

The R<sup>2</sup> in the model is 0.785 which means that the independent variables can explain 78.5% of change in the dependent variable. The adjusted R<sup>2</sup> demonstrates that 82% of the variances between dependent and independent variables in this model.

### ANOVA Analysis

#### ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6342.651	1	6342.651	43.6	0.000 <sup>b</sup>
	Residual	201.63	198	25.387		
	Total	6543.714	199			

a. Dependent Variable : ELP

b. Predictors: (Constant), VAs

Table-2 ANOVA Analysis of the Variables

The researcher used one variable that is acting as independent variable and model shows the significant impact of this variable on dependent variable enhancing learning process of students in district Dera Ghazi Khan.



## Regression Analysis

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.462	1.450		3.504	.000
	Vas	0.351	0.675	0.876	1.382	.003

a. Dependent Variable: ELP

Table-3 Regression Analysis of the Variables

Beta explains the contribution of independent variable visual aids with beta coefficient of 0.351 and sig. value of .000 makes the strong contribution in explaining the enhancing learning process. The independent variable shows impact) on dependent variable enhancing learning process ELP significantly. The statistical tests applied in this case, also suggest there is a strong relationship between independent variables and dependent variable.

### Correlation Analysis

Correlation		ELP Average
VAs Average	Pearson Correlation	.956**
	Sig. (2-tailed)	.000

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table-4 Correlation analysis

Result declaring significant correlation=.956 because value is falling between -1 to +1.

The regression analysis shows that there is a significant impact of independent variable on dependent variable enhancing learning process ELP. Also the correlation analysis shows that the correlations between variable is as follows, the variable has correlation significant at 0.01 levels with each other. The results of correlation and regression analysis support the research hypothesis i.e., the factors have a significant and positive relation with dependent variable enhancing learning process in district Dera Ghazi Khan.

### FINDINGS

The research has shown that high schools in the research areas did not have adequate teaching/learning resources to enable high school teachers deliver quality education to their pupils. From this finding it might be concluded that this could be one of the reasons why such resources might not be used in high schools. Further the research has shown that high schools under research lacked adequate funding to purchase teaching/learning resources such as maps, globes and text books for use by teachers during lessons.

It was also seen that in terms of availability of teaching/learning resources, high schools were grossly under-resourced in terms of basic facilities such as text books and equipment. This scenario has greatly affected teaching and learning for both teachers and students respectively. The research has also shown that although the majority of the students have access to teaching and learning resources, schools have only basic tools, which are also not enough for students and teachers.

The research also found out that most teachers could not improvise teaching/learning resources for their teaching and did not even borrow some teaching/learning resources from other schools. From this it can be concluded that high school teachers lacked time and proper equipment which they could not afford from their school budget.

As regards the most popular teaching/learning resources the research revealed that there were the usual text books, wall charts, atlases and rain gauge. This in itself shows the seriousness of lack of information for the students and teachers from other sources.

This research has also shown that visual aids teaching/learning resources such as TV, CDs computers, recording tapes and radios were not the in some schools and therefore could not be used by both teachers and students for teaching and learning respectively. This research has also shown that the use of ICT and internet was not yet popular in high schools. The findings of the research has shown that there are very few teachers who are trained in the use of ICT, therefore, teachers in high schools are not able to discuss the types of software packages to be used in teaching in high schools.

On the provision of teaching/learning resources, the research revealed that it was the responsibility of individual schools to make such resources available to both teachers and students. It is hoped that this research has provided valuable information to other researchers who would want to further investigate the availability and use of teaching/learning resources in the Dera Ghazi Khan institutions.

The findings of this research are not only useful for teachers teaching in the schools, but also to the lecturers with allied field, especially those who are teaching learner teachers and students in the teacher training colleges, universities and other educational institutes. The findings may be served as guidelines for teachers when implementing visual aids in teaching, as they want their students to fully concentrate on the lesson, by being aware of the expectations and needs in literature teaching. When the teachers know how to grab students' attention, teachers can provide a friendly and interesting atmosphere for the students to learn. This will encourage the students not to just learn by listening and writing what the teachers told, said and provided in the classroom, but they will find their individual initiative to read what they learn in order to improve their own

understanding towards the lesson. Furthermore, the implementation of visual aids in teaching is less time consuming. As a result, the teachers will have more ample time to create enjoyable classroom activities and conduct an effective teaching and learning process.

### CONCLUSIONS

From this research following conclusions have been drawn;

- 1- The research concluded that using visual aids as a teaching method stimulates thinking and improves learning environment in a classroom.
- 2- Effective use of visual aids substitutes monotonous learning environments.
- 3- Students develop and increase personal understanding of the areas of learning when they experience a successful and pleasant learning in the classroom.
- 4- Students find visual aids sessions useful and relevant when it has some direct relation to the course content.
- 5- The present research gave insights on students' perception and opinions on the use of visual aids and resources. However, it is also imperative to redirect teachers opinions, perceptions, experiences, failures and success while using visual aids resources.

### RECOMMENDATIONS

According to the findings following recommendations are made in this research:

- 1- Teachers may be gave importance to the students opinion regarding the visual aids understanding.
- 2- The school, college and university administration authority must share the opinions of the students regarding the usage of visual aids that will be helpful in enhancing the learning system.
- 3- Refresher courses, workshops and conferences may be arranged for the teachers for improving their skills of using visual aids to the needs of students.
- 4- There is need for the Ministry of Education to mount periodic training sessions for teachers who are already in the field to be retrained on recent discovery regarding the use of teaching/learning resources in teaching lessons in high schools of Dera Ghazi Khan.
- 5- The Ministry of Education should appeal to non-governmental organizations, the private sectors, individuals and industries to assist in supplementing and substituting obsolete educational materials and teaching /learning aids like audio and visual materials and software packages.
- 6- There is need for teachers in the field to have a forum for meeting periodically to assess the effectiveness of their teaching using the methods of instructional and educational technology as applicable to the organization of the content of the school syllabuses at high schools, colleges and university of Dera Ghazi Khan.
- 7- The research has further shown that the type of teaching/learning resources mostly used by high school teachers were text books which they continued to rely heavily on for their teach. This research therefore, recommends that high school teachers should be exposed to modern use of other teaching resources such as audio and visual aids, computers, photographic materials such as film strips slides, photographs, flat pictures and internet. This should be facilitated by the government through the Districts offices.
- 8- The personality of a teacher is a symbol for his students so the teachers may be tackled the students carefully and wisely.

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