



Elementary School Teachers' Perceptions toward the Use of Graphic Organizers

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Abstract: *The concept of graphic organizers fosters better student achievement with traditional teaching method. Survey research was used to gather quantitative data from population. The population of this study was elementary school teachers in Lahore. The sample consisted of 75 teachers. It is concluded that graphic organizers are an effective strategy for enhancing various skills in students' performance in the class. As both male and female teachers have same opinion about graphic organizers in classrooms for the betterment of students. The traditional teaching style is an activity-based style, which will eventually improve the Education system of Pakistan as a whole because education is thought to be a backbone of a country. The delivery of the lesson by the use of graphic organizers seemed to promote more student success than the use of the lecture method and should be promoted in classroom activities.*

Key Words: Graphic Organizer, Students' Performance

Introduction

Graphic organizer (GO) are visuospatial symbols that develop the link between concept, structure and content of text using circles, arrows and lines in order to explain context (Darch, 1986). Teachers always first choice is to use such strategies which help in improvement and effectiveness of teaching and learning of the students. In order to facilitate learning one of tool is (GOs), it is also known as advanced organisers (AOs), however I will use graphic organizer in my study. It is not only use to depicts the relationship between facts, ideas, fact or terms within a learning task but also allows the learner to change or add their previous information (Chapman, n.d.). As Praveen and Premalatha (2013) also advocate

its effectiveness that assist learners to improve creative & critical thinking skills, enhance learner interest, satisfaction and motivation. Moreover it increases communication between leaners & teachers.it facilitates the students independent and self-regulated learning. Teachers are crucial to initiate this change as they are directly responsible for the propagation of knowledge. This action can be effectively executed with the help of teachers as they play a chief role in shaping societies (Akyüz, 1978).

It was evident from previous researchers that graphic organizers acted as one of the most significant and effective tool, to aid the process of learning. When Graphic organizers are used effectively in the classroom, they can improve learning outcomes while also motivating

learners to become more active and autonomous students (McKnight, 2010, p. 1). Graphic organizer brings betterment in education and it has tremendous advantage in the field of education. By consider the effectiveness of this tool there's still some institutes and teachers in Pakistani context who are not using graphic organizers and even aren't ready to adapt this method for teaching. In order to implement the use of graphic organizers in educational institutes, Government should make it compulsory for teachers to use this method in classroom to teach students. So, it is pertinent to know the Elementary school teachers' perceptions towards the use of GO in their classroom.

The identification of teachers believes regarding graphic organizers helped in assessing their level of understanding and their recommendations in order to instigate the concept of GOs in public and private schools. This study may help to measure the significance and examined its implementation value. By use of different graphic organizers, it is proposed that student will enhance their attainment of main or most important concept unfortunately, former studies have highlighted the low knowledge of teachers regarding the usefulness of graphic organizers and the other new educational strategies vital for Environmental Education. It will show how we can improve students' learning by using different unique method like graphical representation in the form of flowcharts, cladogram, concept maps, descriptive wheels and spider chart etc. There are a variety of approaches that have been recommended by teachers to improve education across the curriculum, however many of them are visual apparatuses, such as graphic organisers.

Teachers who use GO in their classrooms have found them to be useful tools for assessing students' knowledge. Teachers were aided by GO in identifying areas where students were bewildered. By consider its effectiveness I research in Pakistani context. Therefore, the objective of my research is to know what teacher perception towards graphic organizers.

This study in result will help to assess the perceptions of teachers' individual and collective believes and practices regarding effectiveness of Graphic organizers and identify deep insights and gaps in their perceptions. It will relate their views with their demographics. It will act as a milestone for teacher training institutions, curriculum developers and environmental education advocates by portraying the need, effectiveness and implications of new strategies like graphic organizer of teacher training programs in terms of education within the context of Pakistan.

Objectives of the Study

The objectives of the study were to:

1. Identify the perception of teachers about the use of graphic organizers.
2. Identify the difference in the perception of elementary teacher between male and female.

Research Questions

1. What are the perception of elementary teachers about the use of graphic organizer?
2. What are the perception of elementary Male teachers about the use of graphic Organizer?
3. What are the perception of elementary Female teachers about the use of graphic organizer?
4. Difference between the perception of elementary Male and Female teachers about the use of graphic organizer?
5. What is the difference of opinion of public school teachers about the usefulness of graphic organizer?
6. What is the difference of opinion of private school teachers about the usefulness of graphic organizer?

Methodology

The study is descriptive in nature and survey method was employed to answer the questions. Quantitative methods of collecting data were used to measure the perception about the use and usefulness of graphic organizers. The

researcher uses the questionnaire which is low cost effective and practical for large sample (check & schutt 2012). Further it is very useful to explore the human behavior and frequently used in social and psychological research (singleton & straits.2009)

Population

The population for this study comprises of elementary school teachers.

Participants of the Study

The 100 elementary school teacher has taken

from 10 schools (5 public and 5 private) schools those teachers who show willingness to solve the task in a given time and self-regulation questionnaire.

These schools are selected through conveniently and purposefully. Researchers selected a sample based on availability, location, time, or accessibility (Ary, Jacobs, Sorensen & Walker, 2018, p. 431). It is worth mentioning that researcher select such schools in which graphic organizers is being practiced. The information is gather by the visit of such schools.

Table 1. The Names of the schools and the number of teachers' are given below

S. No	Public Schools	Private Schools	No of Teachers
1	Govt model girls high school	The smart school	10
2	Govt girls high school	American lyceum	10
3	Wapda girls high school Allama Iqbal town	The professional school	10
4	City district Govt girls/boys high school	Lahore grammar school	10
5	Anjuman Hamiyat e Islam	Beacon house school system	10

Data Collection Tool; Questionnaire

The researchers visited ten schools in Lahore and collected data from all these sampled schools. Data was collected from teachers' at elementary level through questionnaire.

Researcher used questionnaire as a major tool, which includes variables (practice, usability, teacher believe or other factors) related to the graphic organizers as it helped to conclude teachers perception either using graphic organizers in classroom are beneficial for teachers or not. A questionnaire on five point liker scale was adapted.

The researcher piloted the questionnaire but the piloting was not part of main study.

1. Firstly, researcher made fifty statements related to topic including merits and demerits of using a graphic organizers in classrooms to conclude that either graphic organizers are efficient for students understanding while delivering the lecture or not.

2. After adapting the questionnaire researcher added questionnaire statements on Google form one by one and provide them a scale and then researcher was send questionnaire to main teachers for pilot testing either my questions are accurate or not.
3. Researcher sent questionnaire in Google form to teachers as due to COVID schools were closed that's why researcher could not collect data by hand from teachers. So, researcher had to collect data on Google form and also could add questions on it and then researcher was identify those teachers who can easily answer and knows this new concept.
4. Researcher noted some ambiguous statements and confused to the respondents identified during piloting. The Researcher recognizes that there are a number of terms/words that the participants are unable to understand due to their difficulty. As a result, the researcher omits or replaces these

complex words with simple words, and the instructions are written in their native language. That's how researcher reduce statements from 50 to 30.

5. It is evident that the reliability of questionnaire was 0.7 which means my questionnaire is valid as it measures the questions which needed to be addressed.

The information was only be used for study purpose. Personal information was kept confidential. Anonymity of data was assured to the respondents.

Data Analysis

The data was analyzed by using (SPSS) version 24. Responses on teachers' perception towards

Teacher s' Responses on Practice of Graphic Organizer

Table 2. Frequency of teachers' response on practice of GOs

S. No	Statements	SD%	D%	N%	A%	SA%	Mean	Sd
1	I observe positive response of students while teaching lesson using a graphic organizer	4	1	16	49	29	3.99	.937
2	I draw Spider maps to help students comprehend concept.	7	15	24	37	17	3.44	1.142
3	I draw concept map and mind map to help students.	1	4	27	41	27	3.88	.900
4	I use describing wheel and problem solution chart as a major graphic organizer while teaching lesson	7	4	32	33	24	3.64	1.098
5	I use those graphic organizers which are cost effective.	5	11	21	39	24	3.65	1.121
6	I experience difficulty while teaching through graphic organizers.	11	20	29	31	9	3.08	1.148
7	I feel graphic organizers a time-consuming to create for a specific need.	5	17	27	33	17	3.40	1.127

Interpretation

- 79% teachers observed that when they used different graphic organizers in classroom student show positive responses in leaning and also actively participated in classroom activities but 5% did not observe while 16% were neutral.

the effectiveness of Graphic organizers were coded and entered in SPSS. Researcher entered the gathered data in SPSS software. The researcher used descriptive statistics to calculate frequencies and percentages. And applied independent sample t test to find out the significant difference of gender and institute. After applying test researcher used the output of the test to interpret its results.

Data Analysis and Interpretations

Initial Analysis

This consist of four categories. Researcher analyzed each category separately this part of description is considered as part 1.

- More than 50% teachers used Spider maps technique to help students comprehend. Teachers admitted that they draw concept map and mind map and used describing wheel and problem solution chart to help students while teaching through graphic organizers whereas 27% were neutral.

- 63% teachers said this is cost effective and also preferred handmade A.V aids which are cheap and in expensive and also accessible easily whereas 40% teachers admitted that they get frustrated because they experience difficulty while teaching through graphic organizers but 31% did not admit.
- 51% teacher thought that they exert more effort when they create different forms of graphic organizers and feel graphic organizers a time-consuming to create for a specific need but 22% did not think so while 27% were neutral.

Teacher s’ Responses on Beliefs of Graphic Organizer

Table 3. Frequency of teachers’ response on Beliefs of GOs

Statements	SD %	DA%	N%	A%	SA%	MEAN	SD
1 I believe graphic organizers assist with brainstorming and organizing large amount of subject material.	7		15	44	35	4	1.05
2 I believe graphic organizers enhance critical thinking and memorizing skills.	8	1	15	39	37	3.96	1.14
3 I believe Graphic organizers are helpful for students to simplify complex information into simpler form	8	3	21	35	35	3.88	1.13
4 Graphic organizers almost always integrate higher-level thinking.	8	9	27	36	20	3.51	1.16
5 When student use GOs, the teacher has a good/ better understanding of student’s level of understanding.	4	1	25	52	17	3.77	.894
6 I believe graphic organizers can be used throughout learning task and assist in producing completion for students.	3	4	23	41	29	3.91	.961
7 I believe graphic organizers allow students to classify Ideas and communicate these ideas in an organized way.	3	5	12	56	24	3.93	.905
8 It is more useful, and more fun to study from notes on organizers than from traditional notes.	4	3	19	32	43	4.07	1.04
9 I believe graphic organizers help student’s increase reading comprehension and understanding.	9	4	13	51	23	3.73	1.14
10 I believe graphic organizers act as effective instructional tools.	7	3	19	40	32	3.88	1.10

Interpretation

- Above 70% teachers believe that graphic organizers motivates brainstorming in students to clarify things during lecture and it enhance student critical thinking and memorizing skills. Graphic organizers are helpful for students to simplify complex information into simpler form while 11 % did not think so.
- Mostly 56% teachers believe that graphic organizers always integrate higher level

thinking and also students actively participate in the discussion, answering questions and clarifying things .Graphic organizers can be used throughout learning task and assist in producing completion for students but 7 believe that it did not affect students Learning.

- 80 % teachers believe GOs allow students to classify Ideas & communicate these ideas in an organized way but 8% believe that it did not affect students Learning while 12% were neutral
- More than 74 % teachers believe that when they use graphic organizers

students actively participate in the discussion and more fun to study from notes on organizers than from traditional notes .Graphic organizers help student's increase reading comprehension and understanding in organized way but 13% believe that it did not affect students Learning while 13% were neutral.

- 61% teachers believe that graphic organizers motivates brainstorming in students to clarify things during lecture but 10% did not think.

Teacher s' Responses on Usability of Graphic Organizer

Table 4. Frequency of teachers' response on usability of GOs

S. No	Statements	SD%	D%	N%	A%	SA%	Mean	Sd
1.	Graphic organizers are also used as communication tools that uses visual symbols to express, thoughts, concept, knowledge, or idea.	3		16	53	28	4.04	.829
2.	Communication skills, analytical, creative thinking, Reading and writing skills of students are all subject to improve when teachers use graphic organizers in classroom.	3	1	11	55	31	4.09	.841
3.	Graphic organizers enhance students' performance and raising the test scores in the classroom.	4	3	19	48	27	3.91	.961
4.	Graphic organizers are effective for students who have difficulty in learning		4	24	45	27	3.95	.820
5.	Graphic organizers increase learning & understanding of subject matter content.	3	1	17	53	25	3.97	.854
6.	Graphic organizers help students structure writing projects.	3	1	21	39	36	4.04	.936

Interpretation

- More than 80% teacher thought that Graphic organizers are also used as communication tools that uses visual symbols to express thoughts, concept, knowledge, or idea and improves different skills of student like(Communication skills, analytical,

creative thinking, Reading and writing skills) when teachers use graphic organizers in classroom but 4% did not think so while 11% were neutral.

- More than 70% teacher believe that Graphic organizers enhance students' performance and raising the test scores

in the classroom and also effective for students who have difficulty in learning .Mostly teacher thought that Graphic organizers increase learning &

understanding of subject matter content and it help students structure writing projects and difficult task .

Teacher s’ Responses on other Factors of Graphic Organizer

Table 5. Frequency of teachers’ response on other factors of GOs

S. No	Statements	SD%	D%	N%	A%	SA%	Mean	Sd
1	I learned about graphic organizers in college/teacher education courses.	4	11	35	41	9	3.41	.946
2	I learned about graphic organizers in teacher workshops or in service-training,	4	15	24	52	5	3.40	.944

Interpretation

- More than 50% teachers agreed that they learned about graphic organizers in college/teacher education courses and learned about graphic organizers in teacher workshops or in service-training.
1. This part will explain difference of opinion on basis of gender (male and female) perception about the usefulness of GO

Ho1: There is no significant difference in the perception of elementary teachers (male and female) about the usefulness of graphic organizers.

Teacher Beliefs

Comparison between elementary school teachers (male and female) perception about the usefulness of graphic organizers on the basis of gender.

Table 6. Shown that

	Variables	N	Mean	t	df	Sig.(2-tailed)
Belief Total A	Male	23	8.0435	.490	73	.625
	Female	52	7.8077	.594	66.970	

Table 6 indicates that there is no significant difference of opinion between male & female respondents as the significance value is (.625) which is above the 0.05 level of significance. The null hypothesis (there is not a significant difference in perception between female and male respondents) is failed to reject that means male and female opinions are almost similar on the indicator of their belief of the usefulness of graphic organizers.

2. This part will explain difference of opinion on basis institute (public and private) schools perception about the usefulness of GO:

Ho2: There is no significant difference in the perception of elementary schools (public and private) teachers about the usefulness of graphic organizers.

Teacher Beliefs

Table 7. Comparison between elementary school (public and private) teachers’ perceptions about the usefulness of graphic organizers on the basis of Institution.

	Variables	N	Mean	t	df	Sig.(2-tailed)
Belief	Private	51	7.47	-2.83	73	.006

Variables	N	Mean	t	df	Sig.(2-tailed)
Public	24	8.75	-3.51	72	.001

Table 7 indicate that there is strong significant difference of opinion between private & public institute as the significance value is (.001) which is less the 0.05 level of significance. Therefore our null hypothesis “there is no significant mean difference between public and private school teachers perceptions about the usefulness of graphic organizers” is rejected and it is concluded that there is a significant mean difference between private & public institute teachers’ perceptions about the usefulness of graphic organizers at elementary level. Further, it is also concluded that public school teachers’ opinion differ from private school teachers in case of the usefulness of graphic organizers.

Discussions, Conclusions and Recommendations

The main purpose of this study research is to know elementary school teachers perception towards the use of graphic organizers and to know their opinions about graphic organizers either it is effective to use in the classroom or not. A questionnaire is made for this purpose which consists of four factors i.e. other factor, practices, teacher belief and usability. Researcher used this questionnaire in both public and private schools to collect data from male and female teachers.

In other factors, researcher ask if they learn about graphic organizers in teacher trainings and programs. Some of them know but some teacher did not know about graphic organizers so first of all, we should implement graphic organizers in schools so that teachers can aware of it and provide opportunities to use graphic organizers and for the betterment of students. Most of the teachers said that they knew about graphic organizers from teacher training and program but some gave neutral opinion and some disagree so the main difference between public and private schools is significant as they both have almost same opinion

Some students are weak in learning but if teachers can teach them with different strategies so their dislikeness can change in to likeness towards complex subjects like maths, science etc. and it will also develop higher order ability in students so teachers should use GOs in classroom. It is concluded from the findings that if we aware teachers about the graphic organizers in teaching programs so teacher will teach the students in a new and advanced way as compared to the traditional method and both male and female teachers think that it is beneficial to use graphic organizers in teacher trainings.

The other finding also claim that graphic organizers is useful in brainstorming, enhance critical thinking, develop higher order thinking and make complex information into simpler one and it helps to students to understand the lesson more easily as it makes the complex concepts easier for the students so teachers should use GOs in the class to develop better learning in learners’. The purpose of GOs is to explain how concepts are related to one another. Furthermore, the visual organisation of knowledge serves as an effective aid to the cognitive process. It is concluded that both public and private schools believe graphic organizers is the best learning tool for students as it makes learning more effective as compared to any other method in teaching.

There is no significant difference between the practices of both female & male teachers as they both uses problem solution charts, maps and they both find positive response in students when they use graphic organizers in classroom but the only drawback these teachers found is that graphic organizers is time consuming to use in classroom. According to the teachers, it is difficult to manage time when they use graphic organizers in classroom.

It is also concluded from both public and private schools that graphic organizers are effective and best learning tool but it is time consuming and it is difficult to use in the classroom. They find graphic organizers

effective in learning students but facing difficulty when it comes to manage time in the forty minutes lecture.

The last factor which is usability in my research. According to this factor, graphic organizers enhances communications skills, critical thinking skills and also improve test scores of students and it also helps in making difficult tasks easier. That's why both male and female teachers have concluded that graphic organizers have affect students in a positive way as they notice significant changes in students after using graphic organizers. When compared to traditional teaching approaches, the findings of this study show that graphic organisers are significantly more successful on educational achievement. But there is a significant difference between both private & public schools in case of usability of graphic organizers. they both have different opinions on using graphic organizers because private schools use graphic organizers in their classroom on the other hand most public schools does not use graphic organizers.

Conclusion

As a conclusion, there are a few effects of GOs in learning. GOs serves as a roadmap for students to follow as they learn new material. Further GOs also increase learners' achievement & motivation when students satisfied learning. Because GOs have been shown to be beneficial in learning, they can be used to reinforce and direct learners' reasoning & thinking. Graphic organizers may be effective and the most useful strategy for not only

teachers but also for students as it enhances various skills in the students and improve their performance in the class and it helps the students to understand the complex concepts easily. As both male and female teachers have same opinion about graphic organizers that's why we should use graphic organizers in classrooms and spread awareness about it in different teaching programs so that teacher can use this strategy in classrooms for the betterment of students.

Recommendations for Future Research

1. The research questions that I wrote in my research was based on the fact that in the training of teachers, graphic organizers are mentioned but they are not aware of it so researcher would like to recommend future researchers to spread awareness about graphic organizers and explain their usefulness in studies
2. The research revealed that teaching through Graphic Organizers is beneficial for developing cognitive abilities in the learner. It is recommended to compare the effect of different types of Graphic Organizers on the Achievement and Motivation of the students.
3. Last but not the least, no lesson or subject is boring in itself, it's all a matter of how that subject is perceived and presented. You will love the subject if it is explained in a better way & you will hate the subject if it is explained in a poor and bad way.

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