Graphic Organizers in Teaching-Learning Process.

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Abstract

Graphic organizers (some of which are also called concept maps, entity relationship charts, and mind maps) are a pictorial way of constructing knowledge and organizing information.They help the student convert and compress a lot of seemingly disjointed information into a structured, simple-to-read, graphic display. The resulting visual display conveys complex information in a simple-to-understand manner. According to many researchers, graphic organizers are the useful for teaching as well as for better learning. Thepresent study focuses to find out the opinions of the B.Ed. students regarding the use of graphic organizers in teaching-learning process. The responses of the B.Ed. students showed that graphic organizers are useful to make teaching-learning more effective.

Key words: *Graphic Organizers, Teaching-Learning Process, B.Ed students, Opinions.*

Introduction:

Teaching-learning process is the heart of education. It is the most powerful instrument of education to bring about the desired changes in the students. Teaching learning are related terms. While teaching only the teacher can take care of the students' learning by planning few things in his/her teaching. To make students' learning effective, teacher should present information in a manner that is clear and organized. A clear, organized style will assist students in the note-taking process, recall and remember the information and also will help them to link the new information to their existing schema of knowledge. (Gloria A. Dye. Helping Students Link and Remember Information).And here **Graphic Organizers** can be found fruitful to fulfill the needs of the students.

Graphic organizers (some of which are also called concept maps, entity relationship charts, and mind maps) are a pictorial way of constructing knowledge and organizing information. They help the student convert and compress a lot of seemingly disjointed information into a structured, simple-to-read, graphic display. The resulting visual display conveys complex information in a simple-to-understand manner.

So, Graphic organizers are excellent tools for learning the structure of thinking skills. A graphic organizer provides a powerful visual picture of information and allows the mind "to see" patterns and relationships. There are numerous types of organizers and each type represents a
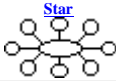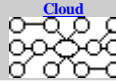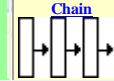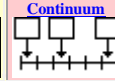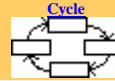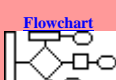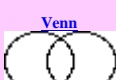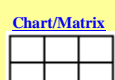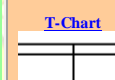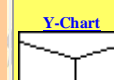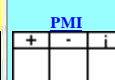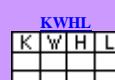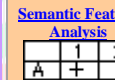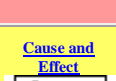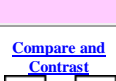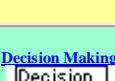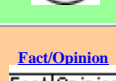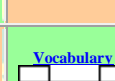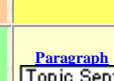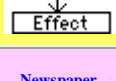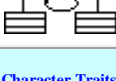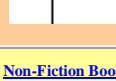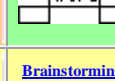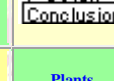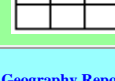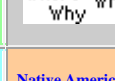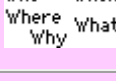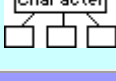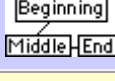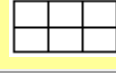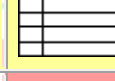
different thinking skill. We use them everyday in our lives. The most common example is the calendar. Using a calendar helps us to gather, sift, sort and share information.

Type of Graphic Organizers:

(Graphic Organizers,http://members.whro.net/~pterry/vwc/week7/Gos.htm)

Star/web	• Useful to show definitions, attributes, examples, and brainstorming
Chart/Matrix	• Useful to show attributes, comparing and contrasting, and evaluating.
Tree/Map	• Useful to show classifications, pedigrees, analysis, structures, attributes, examples and brainstorming.
Chain/Flowchart	Useful to show processes, sequences, causes and effects, and chronology.
Sketch/Diagram	Useful to show physical structures, descriptions of places, spatial relationships, concrete objects, and visual images.

Few more Graphic Organizers are as below:(www.enchantedlearning.com/graphicorganizers)

Graphic Organizers can be used to promote higher order thinking skills. Refer to this chart to determine the type of organizer you would use to reach each level of Bloom's Taxonomy. (Graphic Organizers. http://members.whro.net/~pterry/vwc/week7/Gos.htm)

Bloom's Level	Type of Graphic Organizer	Purpose
Knowledge	Spider Maps Linear String	to describe item; to describe a sequence of events, continuum, storyboard, cycle
Comprehension	Hierarchy Diagram	to classify items
Application	Flowchart	to predict sequence of events
Analysis	Fishbone Map Concept Map	to identify causal relationships to explain relationships
Synthesis	Idea Map	to solve or plan
Evaluation	Venn Diagram Comparison Matrix	to compare/contrast two items to compare/contrast two or more items

Finally we can say that Graphic organizers provide students with a road map to follow as they expand their schemas by linking them to existing knowledge. Thus Graphic Organizer can be used by teachers to make their teaching more effective.

Review of Related Literature:

➢ A study on 'Graphic Organizers and Students with Learning Disabilities'(Dexter, Douglas D., Hughers, CharlesA., Research Article, 2011).Students of upper – elementary, intermediate and secondary students with learning disabilities were the part of the study. The major findings were that across several conditions, setting and features use of graphic organizers was associated with increases in vocabulary knowledge, comprehension and inferential knowledge.

➢ Improving Organizational Skills Through the Use of Graphic Organizers by Capretz, Kari, Ricker, Barbara, Sasak, Amanda. (Janvury, 2003) Ph.D.: The above research gives information about the improvement done in the organization skill in writing by using graphic organizers. The targeted population consisted of second, third and fifth grade students in a suburban community. After the experiment an improvement was found in the organizational skills during the writing process. Students had growth in the area of transferring these skills into other subject areas.

➢ The Use of Graphic Organizers in Vocabulary Instruction by Smith and Jessica J. Ph.D. April, 2002: The above study was conducted to find out whether graphic organizers or traditional methods were a more effective way of instructing and assessing vocabulary development. The results of the study revealed no significant differences in vocabulary development with the use of graphic organizers versus traditional methods.

➢ The Effects of Graphic Organizers on the Creative Writing of Third Grade Studentsby Meyer, Diane Jean. April, 1995 New Jersey.: Two third-grade classes from different schools in the same New Jersey school district were involved in the 13-week study and were given many creative writing assignments. The pretest and the posttest were each graded using both holistic scoring and the Fry Readability formula. Results indicated that the students using the graphic organizers showed an improvement in their creative writing.

Need and Significance:

1. <u>Increased understanding and Insight:</u> The process of converting a mass of data/information/ideas into a graphic map gives the student an increased understanding and insight into the topic at hand.
2. <u>Understand relationship:</u> To create the map, the student must concentrate on the relationships between the items and examine the meanings attached to each of them.
3. <u>Learn to decide priority:</u> While creating a map, the student must also prioritize the information, determining which parts of the material are the most important and should be focused upon, and where each item should be placed in the map.
4. <u>Effective learning as it is Visual:</u>The creation of graphic organizers also helps the student generate ideas as they develop and note their thoughts visually. The possibilities associated with a topic become clearer as the student's ideas are classified visually.
   Also it is beneficial for teaching as it:

Makes teaching more organized	Makes teaching Effective
Need of Graphic Organizer	
Helps to Attain Students' Attention	Saves Time
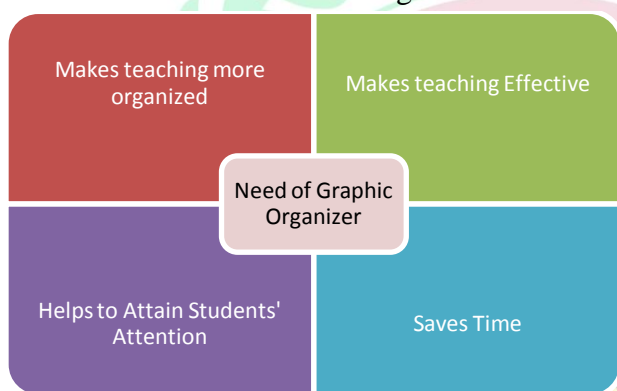
Present study was conducted to find out the answers of the following questions:

- Will Graphic Organizers be useful in learning for the B.Ed. students?
- Whether teaching will be effective by using Graphic Organizers?
- Will the use of graphic organizers make the effective presentation of topics related to the paper'Education for New Times'?
- If using Graphic Organizers will be helpful for students while preparing for their examination?
- Will the use of Graphic Organizers save time during the teaching learning process?
- Will the B. Ed. Students be able to draw Graphic Organizers for different types of subject matter?
- Whether the B.Ed. students will prefer to learn using Graphic Organizers?

Therefore, the researcher decided to use Graphic Organizer during teaching and see the effect.

Statement of Problem: To find out the opinions of B.Ed. students about theuse of Graphic Organizer in teaching-learning process.

Definition of the Key Terms:

➢ Graphic Organizers: A graphic organizer is a visual and graphic display that depicts the relationships between facts, terms, and or ideas within a learning task. Graphic organizers are also sometimes referred to as knowledge maps, concept maps, story maps, cognitive organizers, advance organizers, or concept diagrams.

In the present study the Graphic Organizers usedare star, tree, cycle, venn, chart and paragraph.

➢ B.Ed. Students: Students who are taking training to pursue the Bachelors Degree in Education from Adarsha Comprehensive College of Education and Research, Pune which is affiliated to University of Pune.
➢ Teaching learning process: The class room interaction conducted for section second of the subject Education for New Times of B.Ed. revised syllabus 2008 using graphic organizers.
➢ Opinions: In the present study it refers to the views of the B.Ed. students regarding the use of graphic organizers in teaching-learning process of 'Education for New Times'.

Objectives:
1. To develop Graphic Organizers for using them in the teaching-learning of the subject 'Education for New Times' to B.Ed. students.
2. To find out the opinions of the B.Ed. students about the use of Graphic Organizers during teaching.

Scope:
➢ The present study focuses on the use of Graphic Organizers at teacher educator level.

Delimitation:
➢ Purposive sampling was used by the Researcher.
➢ The present study was restricted to only the B.Ed. students from English Medium.
➢ English medium division of Adarsha Comprehensive College of Education and Research in Pune city was included in this study.
➢ Only second section of the subject 'Education for New Times' in the B.Ed. syllabus (Revised 2008) was included by the Researcher.

Limitations:
➢ Study habits, nature, fatigue, mood, previous experiences of B.Ed. students which may affect their responses are beyond the control of the researcher.

Assumptions:
➢ The B.Ed. students must have seen few diagrams and also have used few diagrams for presentation.
➢ This information can be presented in the form of Graphic Organizers for their learning and teaching purpose.

Methodology:

Multi method research: for the above study, the methods selectedwere:

- For Objective 1: Product Development
- For Objective 2: Descriptive Study: Programme Evaluation (Best, J., & Kahn, J. V., 2005)

Population and Sampling Procedure:

➢ Population: All the B.Ed. Students of Adarsha Comprehensive College of Education and Research, Pune.

➢ Sampling: Only English Medium students of Adarsha Comprehensive College of Education and Research, Pune. Selection of students was done using incidental sampling.

Tools:

➢ 'Education for New Times' was taught by using graphic organizers prepared by the researcher for objective 1.

➢ Tools for Data Collection: Questionnaire was used for data collection.

➢ Tools for Data Analysis: Percentage was used for data analysis.

➢ Tools for Data Representation: Graphs, Tables and Graphic Organizers were used for data represent the data.

Variables:

➢ Independent Variable: Use of Graphic Organizer for teaching Sociology.

➢ Dependent Variable: Opinions of the B.Ed. students towards the use of Graphic Organizers in teaching-learning process.

➢ Control Variable:-Medium of instructions: All students of English medium of Adarsha Comprehensive College of Education and Research wereincluded for the study.
-Syllabus Selected: Only second section of the paper 'Education for New Times'wasselected for teaching students using Graphic Organizers.

Procedure:

Preparing Graphic Organizers for teaching 'Education for New Times'

Actual teaching by using Graphic Organizers for 'Education for New Times'

Collection of opinions with the help of questionnaire

Analysis of Data

Conclusion of the study
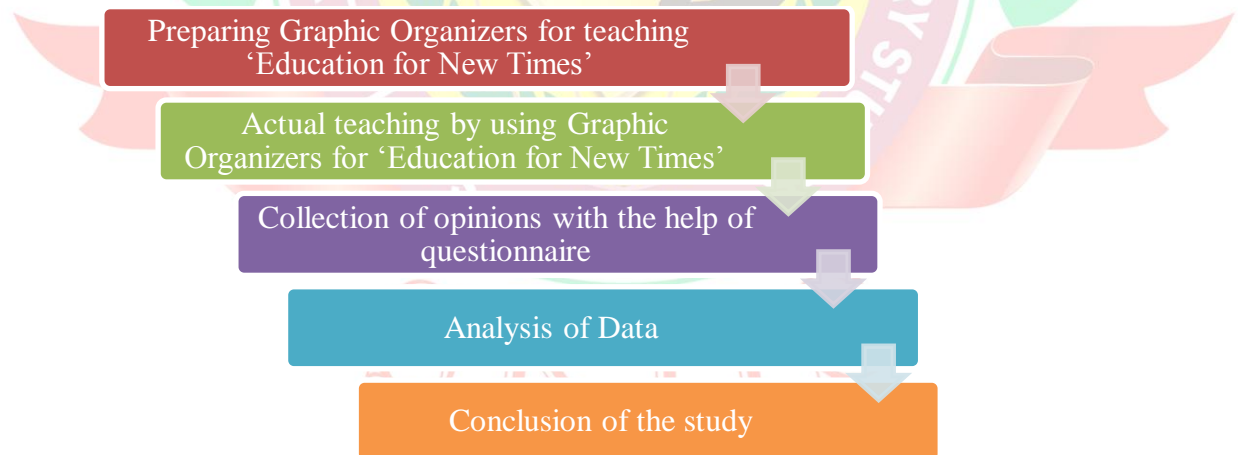
Analysis and Interpretation:

During the lectures some Graphic Organizers were used. I would like to know your views about it. Kindly put tick marks regarding the use of graphic organizers with respect to the following points: S.A. indicates Strongly Agree; A. indicates Agree; S.D. indicates Strongly Disagree; and D. indicates Disagree.

Table No. 1

Sr. No.	Items	S.A.	A.	S.D	D.
1.	It was easy to understand the concept.	83	17		
2.	It was useful to remember for long time.	72	28		
3.	It was useful to understand the relationship.	67	31		2
4.	It was useful to save time (for examination purpose)	77	21		2
5.	It was useful to keep attention during lectures.	63	35		2
6.	It made the teaching-learning process easy.	62	38		
7.	It was useful to develop creativeness.	53	45		2
8.	It was useful to prepare ppts for our own lessons.	65	33		2
9.	It is made the teaching more organized and systematic.	65	35		
10.	It makes the teaching effective.	73	25		2

Observation: From above table it was observed that 83% students strongly agreedthat graphic organizers make understanding easy. 17% students also agreed with the same. 77% students felt that graphic organizers were useful to save time during examination. The remaining 21% students agreed with the same statement. 73% students strongly agreed that graphic organizer made teaching effective. The remaining 25% students also agreed with the same.

Interpretation: From the above observation it is clear that the use of graphic organizers during teaching makes teaching as well as learning effective.

Opinions of Students about using Graphic Organizers for teaching:

Figure No.1

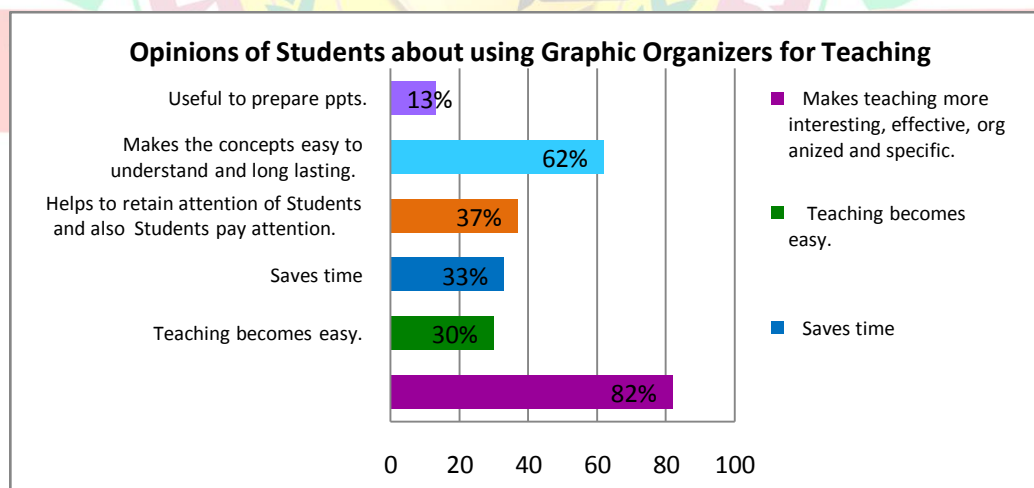**Observation:**

From the above information it is clear that 82% students found that by using graphic organizers teaching becomes more effective, interesting, organized and specific. 62% students said that graphic organizer makes the concepts easy to understand and also one can remember that for long time. 37% students also mentioned that graphic organizers can help to retain attention of students.

Interpretation: It appears that Graphic Organizers are useful for teaching purpose. Teachers can use Graphic Organizers during teaching to make it more fruitful.

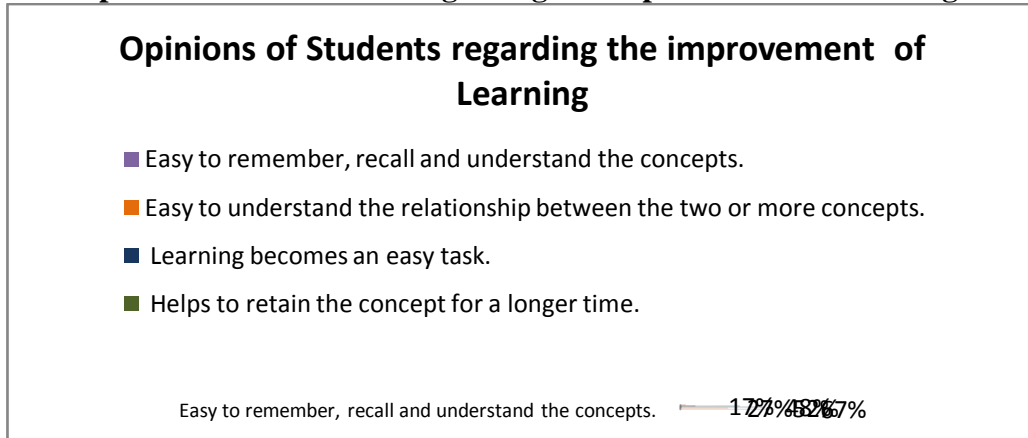**Opinions of the students regarding the improvement of Learning:**

Opinions of Students regarding the improvement of Learning

■ Easy to remember, recall and understand the concepts.

■ Easy to understand the relationship between the two or more concepts.

■ Learning becomes an easy task.

■ Helps to retain the concept for a longer time.

Easy to remember, recall and understand the concepts.　17%48%52%67%

Figure No. 2

Observation: Present data shows that 67% students said that with the help of graphic organizers they could remember the matter easily and also could recall. Not only that but they also could understand the concepts easily. 52% students found that the learning became an easy task. 48% students felt that it helped them to retain the concepts for a long time.

Interpretation: It means graphic organizers are useful in learning process. By using graphic organizers teacher can make students learning better.

Opinions of the Students about the usefulness of Graphic Organizers while preparing for examination

Opinion of Students about the usefulness of Graphic Organizers while preparing for Examination

☑ Saves time

☑ Effective, neat and systematic presentation.

☑ Easy to recall the matter.

☑ Helps to revise the topic within a short period of time.

☑ Both ways for students and for teachers also while checking.

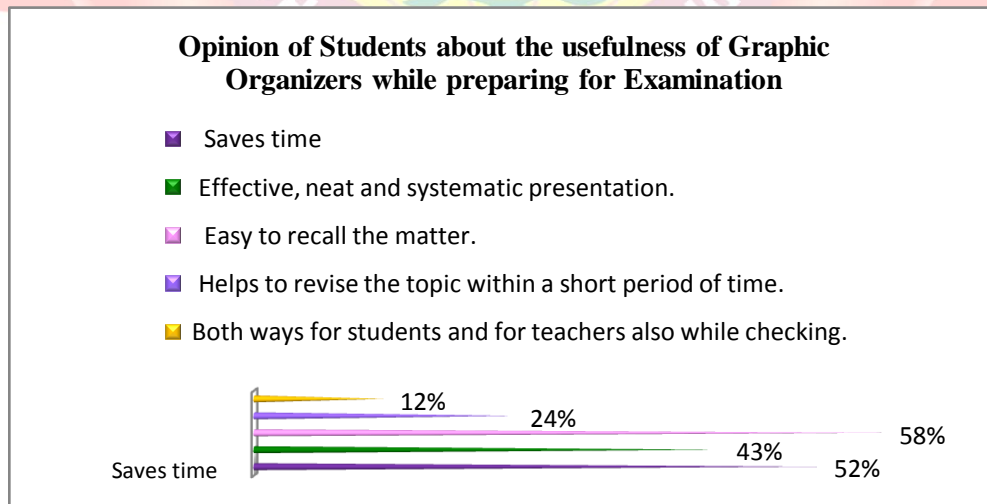12%　24%　58%

Saves time　43%　52%

Figure No.3

Observation: From the above table, it is observed that 58% students felt that it is easy to recall the matter if graphic organizers are used during teaching. 53% students' opinion was that the use

of graphic organizer saves time. And 43% students saidthat the presentation becomes more effective, neat and systematic by using graphic organizer.

Interpretation: With the help of the observation it is clear that the use of Graphic Organizer helps the students while preparing for their examination.

Graphic Organizers Drawn by the Students
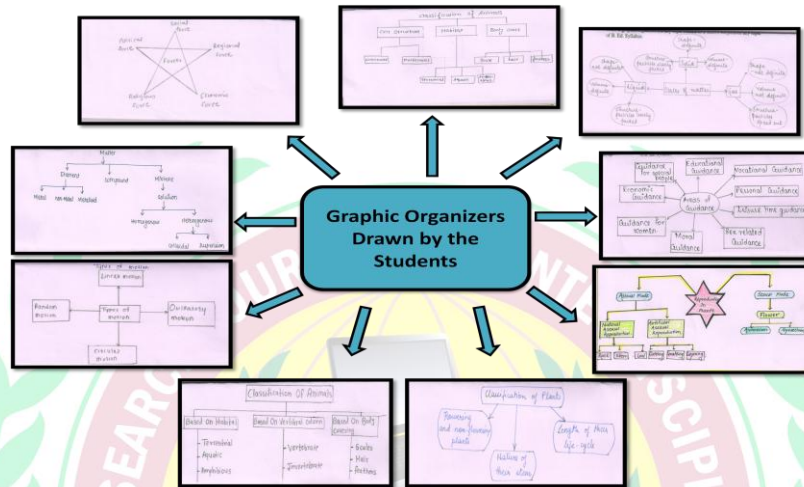
Observation:

✓ The manner of drawing graphic organizer is excellent. Neat, colourful and different types of graphic organizers were drawn by the students.

✓ To present particular content proper type of graphic organizer was selected.

✓ The matter was presented in a correct manner.

✓ Large numbers of the students were innovative while drawing the graphic organizer.

✓ Different school subjects as well as B.Ed. subjects were taken into account.

Major findings:

Following are the main findings from the study:

1. The data analysis shows that the teaching done for the subject Education for New Times by the researcher using graphic organizers was effective. (Figure No.1)

2. The use of graphic organizer makes teaching-learning process effective. (Table No. 1)

3. The visual presentations have helped the students to learn the subject matter in a better way. (Figure No. 2)

4. Presentations done by the researcher using graphic organizer helped the students to learn how to prepare ppts for their own teaching. (Figure No. 1 and 2)It is clear that graphic

organizers are useful for examination preparation: to recall matter, revision, presentation and time consuming. (Figure No. 3)

5. All the students were able to draw graphic organizers.

6. Graphic organizers drawn by the students shows that all school subjects and B.Ed. subjects can be taught by using graphic organizer. It proves that the use of graphic organizers encouraged them to think about to use graphic organizer in their teaching.

Discussion of findings:

1. The finding from the present study matches with the finding of the research done by Capretz, Kari, Ricker, Barbara, Sasak, Amanda. This study was done to improve organizational skills through the use of graphic organizers.

2. The finding of the study finds similarity in the studies done by Meyer, Diane Jean. The study indicates that the students using the graphic organizers showed an improvement in their creative writing.

Conclusion:

• The teaching done by the researcher using graphic organizers of the subject 'Education for New Times' was effective.

• Majority of the students said that the graphic organizers make teaching systematic and organized.

• Large number of the students is of the opinion that the use of graphic organizer makes learning better.

• Many of the students found graphic organizer useful for the examination purpose.

• All students are successful to draw nice graphic organizers.

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