The Use of Graphic Organizers in Teaching History to Grade Seven Students in Bhutan

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Abstract
This mixed method study was conducted to explore the use of graphic organizers in teaching History to grade seven students in Bhutan. The two main purpose of the study were to compare the learning achievements and to investigate students’ opinion towards using graphic organizers in learning History. The research was conducted in one of the schools in Bhutan with 18 grade seven students over the period of four weeks. The quantitative data was collected through learning achievement tests (pretest and posttest) and survey questionnaires. The qualitative data was collected from semi-structured interview. The analysis of the pretest and posttest scores through Wilcoxon signed rank test revealed 100% positive rank with mean rank of 9.50 and sig. value of 0.01. The mean (\(\bar{x}\)) score of posttest was 14.64, and pretest mean (\(\bar{x}\)) score was 7.83, showing mean (\(\bar{x}\)) difference of 6.81. This indicated that the use of graphic organizers improved the learning achievement of the students. Likewise, the data collected from survey questionnaire and interview showed that the students had positive opinions in using graphic organizers to learn
History. Therefore, this study highly recommends using graphic organizers as one of the learning pedagogy to improve the academic performance of the students in History.

**Key words:** graphic organizers, History, learning achievements, grade seven students.

1. **Introduction**

   The origin of ‘History’ is associated with the Greek word ‘Historia’ meaning ‘information’ or ‘an enquiry designed to elicit truth’ (Talekau, Nayak & Harichandan, 2006). It was invented in 5th Century BC in Greek. History was written in ancient time to keep alive the memory of some past events and to record the experiences of a man which otherwise would be lost. It was not a serious subject in school until 18th century (Momigliano, 1983). Today it is an integral part of education system in every country.

   Bhutan integrated the History subject in its curriculum with the establishment of modern education in early 1960s. Since then, it is one of the compulsory subject for students from grade seven till grade ten. The Bhutanese History curriculum consist of three texts- Bhutan History, Bhutan civics and World/Indian History. History aspires students in understanding the evolution of social, political, cultural and economic conditions of the people, places and events from the past. It inculcates a sense of belongings that leads to unity, solidarity, and protections of oneself and others (Royal Education Council, 2018).

   The study of History plays an important role in the life of students. Through the study of History, they learn important historical knowledge and develops critical thinking skills. Learning History helps them become good citizens; respecting their past and promoting their culture and histories (Quanchi & So’o, 2003). It is an important subject which conveys invaluable lessons from the past and whose worth transcends regional, national and cultural
boundaries (Boadu, 2016). Such subject needs to be taught well in order to make learner’s gain deep appreciation of the relevance of their learning.

According to Wiersma (2008), teaching History has progressed with new ideas and techniques, yet most History teachers still use traditional method of teaching. Such instructional practices emphasized rote learning and memorizing the entire texts, limits their understanding and thinking skills. Here teachers use maximum of instructional time in explaining curriculum in class while students end up listening passively, trying hard to remember information which is soon forgotten (Peldon, 2018). Consequently, students finds the lesson boring and seems to lose interest in learning History (Gyeltshen, 2018; Lhatu, 2017). Thus, Bunda (2017) highlights on the importance of creating inventive ways to teach History that encourage students’ participation in learning.

Many teachers, educators and historians have also shown great concern over the challenges faced in teaching History. History is a complex subject to teach and learn because of its relationships between pupils and the study of past events. These things are neither immediate nor present, so makes the subject difficult to teach (Husbands, Kitson & Pendry, 2004). Reading textbooks can be difficult for students, due to the way textbooks are constructed. The students struggle to understand the connections between ideas and events in textbooks (Oliveira, 2010). Therefore, it is important that History is taught in a way they learn the best. One strategy to enhance learners’ enthusiasm in learning History can be through the use of graphic organizers.

The use of graphic organizers improve students’ learning and interest has been supported by number of research studies. Graphic organizers are tools that supports and enables students to see the relationship between facts and ideas; and organize the information into hierarchy of importance. It helps students know what they are learning (Yunianti, 2014). The study by Nair
and Narayanasamy (2017) showed that the students find History as challenging subject due to difficulties in organizing and understanding the complex past historical events. The use of concept map (a type of graphic organizers) trained the students in organizing the abstract information in graphical form which was much easier to understand.

Zaini, Mokhtar and Nawawi (2010) reports that the use of graphic organizers improves student’s performance and motivation to learn. McKnight (2010) states that when graphic organizers are integrated into classroom, it enhances student comprehension power of the new materials. It improves recall of information and enhances learners’ involvement to summarize and synthesize complex ideas (Tores and Orleans, 2015). The History subject contains vast information which are complex and difficult to be understood by students. Therefore, by using graphic organizers, students are taught to organize those abstract information in graphic forms which are much easier to understand.

So, based on the findings mentioned above, the researcher was interested to find out the use of graphic organizers in learning achievement of grade seven Bhutanese students and their opinions towards it. Some studies could be found on the effect of using graphic organizers on student’s achievement and interest, however, no studies have been yet conducted in History in Bhutan. The finding of the study should encourage History teachers to use graphic organizers to enhance students learning and interest in the subject.

There are many types of graphic organizers. Researcher used five different graphic organizers for this study: (1) concept mapping, (2) Venn diagram, (3) Cause & effect chart, (4) Timeline and, (5) KWL chart. Santiagos & Solis (2016) mentioned that as compared to one tool, teaching more than one graphic organizers would maximize its usage and improve student learning.
2. Research Objectives

1. To compare the learning achievement of grade seven students in History before and after the use of graphic organizers.

2. To find out the opinion of the grade seven students towards using graphic organizers in learning History.

3. Literature Review

3.1. Graphic Organizers

Graphic organizers are graphical representation of concepts or ideas (Owolabi & Adaramati, 2015; Zaini, Mokhtar & Nawawi, 2010). They are tools to help students organize and structure the information with other related concepts in logical sequence of instructional material. The information is represented in the form of words, arrows, pictures or models for processing textual information (Yangdon, 2015). With only few words, concepts are clarified, information and ideas are organized (Cummins & Kimbell-Lopez, 2015).

Graphic organizers originated as an educational application when Ausubel’s ideas developed in 1960’s. In early 1960s, Dr. David Ausubel began conducting research on the effectiveness of advance organizers. His hypothesis was that learning occurred when the learner could connect the new learnings with the prior knowledge of the subject. The graphic organizers were identified as visual aid that connected the learning in a way that was meaningful to the learners (Davoudi & Yousefi, 2016; Osborne, 2016).

Cognitive psychologists are of the view that graphic organizers have their root in schema theory. Jean Piaget used the term ‘schema’ to describe how the newly acquired knowledge and experience is organized and stored internally (Gould, 2012). When people learns something new,
the knowledge is stored and structured in organized way in the brain, enabling to retain the information for longer period (Davoudi & Yousefi, 2016; Owolabi & Adaramati, 2015). Cummins, Kimbell-Lopez & Manning (2015) highlights that the use of graphic organizer helps students to organize thinking and activates connections between what they already know with what they are going to learn.

Piaget was one of the first to put forward the notion that learning occurs through ‘construction’ of new knowledge when leaners are actively involved in learning (Gatt & Vella, 2003). The construction of graphic organizers allows group work between students and teachers, making it as a device for developing learning through social interactions (Bromley, 2008). The organizers aids as an avenue for students to make their learning visible to the teachers and peers to share and assess the learning (Hanley, 2018). Studies show that students who use graphic organizers perform better. It promotes higher order thinking (Osborne, 2016) and can complement text, replace text or emphasize text (Saynay, 2014). It is an approach which focus on learner rather than the teacher (Gould, 2012).

Graphic organizers are easy to use and can be integrated in the classroom using Gallavan & Kottler (2010; 2007) three effective ways of using graphic organizers in classroom- before, during or after instructions, or Youman (n.d) three stages of learning graphic organizers - modeling stage, practicing stage and individual stage could be adopted.

Tayib (2016) provide further principles to use graphic organizers successfully: i) use of graphic organizers must be clear and simple, ii) teach varieties of graphic organizers and let children pick the tools they think might work best to organize the content, iii) the graphic must be used repeatedly to give better results, and iv) lastly avoid photocopying tools, however for beginners, an example can be shown.
3.2 Types of Graphic Organizers

Gallavan and Kottler (2007) describe graphic organizers as visual models, constructed of shapes and linking lines designed to help students organize, understand, and apply information. They have identified eight types of graphic organizers to empower students and teachers in learning social studies as shown in Table 1.

Table 1. Eight types of graphic organizers

<table>
<thead>
<tr>
<th>Graphic organizers</th>
<th>Purpose</th>
<th>Example(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Assume and Anticipate</td>
<td>to check prior knowledge and to introduce a topic</td>
<td>KWL chart</td>
</tr>
<tr>
<td>2) Position and Pattern</td>
<td>to show sequence, order or cause and effect</td>
<td>Time line or chain</td>
</tr>
<tr>
<td>3) Compare and Contrast</td>
<td>to illustrate the similarities and differences of ideas and concepts</td>
<td>Venn diagram</td>
</tr>
<tr>
<td>4) Group organizer</td>
<td>to show type, category or classification</td>
<td>Tree chart</td>
</tr>
<tr>
<td>5) Relate and reason</td>
<td>to show part to whole and whole to part relationships</td>
<td>Inductive and deductive</td>
</tr>
<tr>
<td>6) Identify and imagine</td>
<td>to help students name, describe and brainstorm</td>
<td>Concept mapping</td>
</tr>
<tr>
<td>7) Estimate and evaluate</td>
<td>to show ways to explain, differentiate and examine through various perspective</td>
<td>Includes shapes such as starts and light bulbs</td>
</tr>
<tr>
<td>8) Combine and create</td>
<td>to give freedom to express ideas through individualized approaches</td>
<td>can incorporate parts of different organizer and create a new one</td>
</tr>
</tbody>
</table>

Experts state that when the text or chapter is lengthy, multiple graphic organizers can be used to organize the content across the curriculum. The teachers or the learners need to understand...
the purpose of each type and choose one that best fits the topic or the lesson plans (Zaini, Mokhtar & Nawawi, 2010). Graphic Organizers that are useful in History classroom include flowchart, Venn diagram, story map and timeline. These tools help teach the important historical concept, change of events over time, cause and effect of the events and contrasting cases (Roy Rosenzweig Center for History and New Media, n.d.).

3.3 Benefits of graphic organizers

Graphic organizers are gaining popularity in modern school as a favorite teaching approach in the classroom due to its effective application across a range of subject areas (Torres, España, & Orleans, 2014). Some of the benefits of using graphic organizers as mentioned by educationist, institutions and experts are as follows:

i. The use of graphic organizers develops the student’s critical thinking, enhance their writing skills and helps in analyzing the text. (Graphic Organizer for Reading Comprehension, Grade 3-8, 2015).

ii. Students who use graphic organizers to organize the information remembered more of Historical information (Elwood, 2018)

iii. It can be used by all students regardless of their learning abilities and age (Hanley, 2018).

iv. It aids students in note-taking, presenting information and linking the new information to their existing knowledge for review (Dye, 2000).

v. Student using graphic organizers in the class developed positive emotions on students (Mann, 2014)

vi. It improves learning achievement in test (Chabari, 2018)

vii. The construction of graphic organizer between students and teachers makes learning interactive (Bromley, 2008).
To sum up, it is evident that the use of graphic organizers has a huge impact on students’ learning achievement and interest. It is an effective teaching pedagogy that makes the learning meaningful, develops reading comprehension and writing skills, and enhances critical thinking. Therefore, to enable students to learn History effectively, the teachers should consider integrating graphic organizers in the class.

4. Methodology

This study employed mixed methods approach. The quantitative data were collected through learning achievement tests and opinion questionnaires. The qualitative data were collected through semi-structured interview. The learning achievements (pretest and posttest) were conducted to compare students’ performance before and after the treatment. The survey questionnaire and semi-structured interview were conducted to find out students’ opinion towards using graphic organizers to learn History. Further, five different graphic organizers were incorporated in the lesson plans and implemented for the treatment purpose.

4.1 Research Participants

The target population of this study was grade seven students studying Bhutan History in the second term of the academic year, 2019. The school had two sections of grade seven students, of which one section was selected as sample group through clustered random sampling. Total of 18 students between the ages of 12-17 years took part in the study.

4.2 Research Instruments

In this study, four instruments were used to collect the data. These included four lesson plans, learning achievement tests (pretest and posttest), a survey questionnaire and semi-structured interview.
Lesson plans: Four lesson plans of 90 minutes each were designed integrating five different graphic organizers to teach History in grade seven. With two sessions every week a total of 8 sessions were conducted.

Learning Achievement Test: The learning achievement test consisted of pretest and posttest. Pretest was conducted before giving the treatment and Posttest was conducted after the treatment to the same group of students. The test had 10 questions (multiple choice and short answer questions).

Questionnaire: A post survey questionnaire was conducted to find out the student’s opinion on using graphic organizer to learn History in grade seven. The participating students were asked to indicate the extent of their agreement with each statement on a five point Likert scale from Strongly Agree to Strongly Disagree.

Semi-structured Interview: The participants were interviewed at the end of the study to examine the student’s opinion on using graphic organizers to learn History. The interview was conducted with five guiding questions. The responses of the students were audio recorded, transcribed, translated into English and analyzed using thematic analysis to obtain the qualitative data.

4.3 Validity and Reliability

Before carrying out the study, all the research instruments were tested for validity and reliability. The instruments for this study were validated and rated above 0.67 (IOC) by the experts which indicated that the items were valid for the study. To check the reliability of the achievement tests and survey questionnaires, the researcher conducted the reliability test with 30
grade seven students who were not part of sample group. Cronbach’s Alpha was used to measure the reliability of the instruments. The result of the instruments were greater than 0.7, thus the instruments were acceptable and reliable to be used in the study.

4.4 Ethical consideration

To conduct the research, an approval was sought from the Ministry of Education, Bhutan through the letter from the University. The Ministry of Education then directed the school principal to enable the conduct of the study. The consent was also sought from children and their parents to take part in the study. The participants’ details and responses were kept confidential and anonymous throughout the study.

5. Results and findings

5.1 Data Analysis of Students’ Learning Test

A statistical analysis of the learning achievement test was carried out through Wilcoxon signed ranked test. The comparisons of mean and standard was used to identify the discrepancy between learning achievement scores of the sample group in the pretest and posttest.
Pretest was conducted before the treatment and posttest was conducted after the treatment. The tests questions were framed out of total 20 points as shown Table 2. In the pretest, the highest score of the students was 13.5 and lowest score was 3, where else in the posttest the highest score of the students was 17.5 with the lowest score of 11. Student no. 11 and 17 showed the highest difference of 12.5 points, while student no. 7 showed the lowest but

<table>
<thead>
<tr>
<th>Student number</th>
<th>Pretest (V1)</th>
<th>Posttest (V2)</th>
<th>Difference (V2-V1)</th>
<th>Rank of Wilcoxon</th>
<th>Positive Rank</th>
<th>Negative Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>15.5</td>
<td>9.5</td>
<td>14</td>
<td>14</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>11.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
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<tr>
<td>3</td>
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<td>11.5</td>
<td>8.5</td>
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<tr>
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<td>6.5</td>
<td>12.5</td>
<td>6</td>
<td>7.5</td>
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<tr>
<td>6</td>
<td>11</td>
<td>16.5</td>
<td>5.5</td>
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<tr>
<td>9</td>
<td>12.5</td>
<td>16</td>
<td>3.5</td>
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<tr>
<td>10</td>
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<td>12.5</td>
<td>9.5</td>
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<tr>
<td>11</td>
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<td>17.5</td>
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<td>17.5</td>
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<td>-</td>
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<tr>
<td>12</td>
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<td>11</td>
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<td>4</td>
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<td>7</td>
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<td>10</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>6</td>
<td>18</td>
<td>12</td>
<td>17.5</td>
<td>17.5</td>
<td>-</td>
</tr>
<tr>
<td>18</td>
<td>7.5</td>
<td>14</td>
<td>6.5</td>
<td>9</td>
<td>9</td>
<td>-</td>
</tr>
</tbody>
</table>

| Total          | 18           | 0              |                    |                  |               |               |
increase of 1 point. It can be noted that all the students showed positive increase of scores in posttest as compared to pretest.

Table 3: Wilcoxon signed rank test

<table>
<thead>
<tr>
<th>Rank of Wilcoxon</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Rank</th>
<th>Sig. (2-tailed test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Posttest – Pretest)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative ranks</td>
<td>0²</td>
<td>0.00</td>
<td>0.00</td>
<td>.0001</td>
</tr>
<tr>
<td>Positive ranks</td>
<td>18ᵇ</td>
<td>9.50</td>
<td>171.00</td>
<td></td>
</tr>
<tr>
<td>Ties</td>
<td>0ᶜ</td>
<td></td>
<td></td>
<td>.001</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Posttest < Pretest
b. Posttest > Pretest
c. Pretest = Posttest

Table 3 showed the Wilcoxon signed rank test analysis of the data collected from pretest and posttest scores. The negative rank was ‘0’ and the positive rank was ‘18’ which indicated that 100% of the students had improved their scores in the posttest as compared to pretest. The sig. value was .001, which stated the result was significant.

Table 4: Comparison of pretest and posttest mean

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Mean ($\bar{x}$)</th>
<th>SD</th>
<th>Mean differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>18</td>
<td>7.83</td>
<td>2.88</td>
<td>14.64 - 7.83 = 6.81</td>
</tr>
<tr>
<td>Post-test</td>
<td>18</td>
<td>14.64</td>
<td>2.43</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 showed the comparisons of mean ($\bar{x}$) and Standard Deviation (SD) of the pretest and posttest scores before and after the use of graphic organizers. The pretest mean ($\bar{x}$) score was 7.83 and the posttest mean ($\bar{x}$) score was 14.64 with the mean difference of 6.81. The standard deviation (SD) of the pretest was 2.88 and posttest was 2.43. There was fall of 0.45 in
the SD of the posttest. This indicated that there was improvement in posttest scores after the treatment. This is further illustrated in Figure 1.

![Comparison of Pretest and Posttest Mean](image)

**Figure 1: Illustrates mean (\(\bar{x}\)) of the pretest and posttest scores**

### 5.2 Data Analysis of Questionnaire

The questionnaire was composed of 16 items and was ranked using Likert Scale. The mean (\(\bar{x}\)) and standard deviation (SD) scores were interpreted according to the statistical analysis interpretation of the mean score as shown in Table 5.

#### Table 5: Description of Likert Scale

<table>
<thead>
<tr>
<th>Level of Opinion</th>
<th>Scores</th>
<th>Scale</th>
<th>Extend of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>5</td>
<td>4.5-5</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Agree</td>
<td>4</td>
<td>3.5-4.4</td>
<td>Agree</td>
</tr>
<tr>
<td>Neutral</td>
<td>3</td>
<td>2.5-3.4</td>
<td>Neutral</td>
</tr>
<tr>
<td>Disagree</td>
<td>2</td>
<td>1.5-2.4</td>
<td>Disagree</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
<td>0.00-1.4</td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

Source: Adapted from Lhatu, 2017
Out of 16 items in the questionnaire, 9 items (Item No. 1, 3, 4, 6, 11, 12, 13, 15 & 16) were rated as ‘Strongly Agree’ and 7 items (Items No. 2, 5, 7, 8, 9, 10 and 14) were rated as ‘Agree’. All the items mean scores ranged from 4.06 to 4.67. It was observed that all items were above the mean score of 4 (Figure 2), which signified that the students had positive opinion towards the use of graphic organizers in learning History.

![Figure 2: Questionnaire Level of agreement](image)

The opinion questionnaire was further analyzed and interpreted under four groups as shown in Table 6. The mean ($\bar{x}$) and standard deviation scores of each group were analyzed and interpreted according to the statistical analysis interpretation of the mean score.
Table 6: Mean and Standard deviation scores of the questionnaire in groups

<table>
<thead>
<tr>
<th>SI No.</th>
<th>Opinion Group</th>
<th>Mean ((\bar{x}))</th>
<th>SD</th>
<th>Extend of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Interest in learning History with the use of graphic organizers</td>
<td>4.46</td>
<td>0.346</td>
<td>Agree</td>
</tr>
<tr>
<td>2</td>
<td>Motivation in learning History with the use of graphic organizers</td>
<td>4.40</td>
<td>0.447</td>
<td>Agree</td>
</tr>
<tr>
<td>3</td>
<td>Learning satisfaction after attending the History lesson using graphic organizers</td>
<td>4.40</td>
<td>0.345</td>
<td>Agree</td>
</tr>
<tr>
<td>4</td>
<td>Easiness of the subject with the use of graphic organizers</td>
<td>4.56</td>
<td>0.398</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>4.46</td>
<td>0.320</td>
<td>Agree</td>
</tr>
</tbody>
</table>

Table 6 interpreted that total mean (\(\bar{x}\)) was 4.46 and SD was 0.32, which according to description of Likert scale was ‘Agree’. Among the four groups, the group No. 4 (Easiness of the subject with the use of graphic organizers) showed the highest mean (\(\bar{x}\)) score of 4.56. Followed by group no. 1 (Interest in learning History with the use of graphic organizers) with the mean (\(\bar{x}\)) score of 4.46. The motivation in learning and learning satisfaction displayed same mean (\(\bar{x}\)) scores of 4.40. The data also showed that students ‘Strongly Agree’ that the use of graphic organizers helped in easiness of the subject. Overall, all the four groups were rated ‘Agree’ and ‘Strongly Agree’ as per the Likert Scale description.

5.3. Semi-Structured Interview Data Analysis

The semi-structured interview was conducted at the end of the study with eighteen grade seven students. The responses of students were recorded and translated in English for data analysis. The data was read, analyzed and coded (interpreted) under six themes as below:
5.3.1. Interest

The students shared that the use of graphic organizers made the learning enjoyable and interesting. They did not feel bored but enjoyed the lessons taught through graphic organizers. The classroom activities such as discussion and presentations in peers and groups were interesting activities for the students. It helped them to learn together with friends.

5.3.2. Motivation

According to the students’ responses, the use of graphic organizer had encouraged and motivated them to learn. Most students mentioned how graphic organizes made the learning easy, which motivated them to share their learnings with friends. The confidence level of students had also improved.

5.3.3. Easiness of use

The student revealed that the five types of graphic organizations learned were easy to use which made the learning of History easy. They could easily use the graphics according to the need and context of the text. This made the comprehension of the text easy to understand, analyze and recall.

5.3.4. History comprehension enhancement or Academic gain

Students conveyed that they were able to understand and learn History text better with the use of graphic organizers. The graphic organizers helped them to identify the key points, enhanced their writing skills and reading comprehension. It also helped them to remember and recollect the History lessons. The various use of graphic organizers made the learning better, such as timeline was useful to record the events in chronological order, Venn diagram in finding similarities and differences in two events, and concept maps to identify the main points. So all these helped in better understanding of History.
5.3.5. Performance improvement

Learning History with graphic organizers gave better performance was shared by most students during the interview. The use of graphic organizers helped to transform the complex text into simple form, which was easy to understand and remember. These helped them to perform better in exam or text as reported by the students. Moreover, most student planned to continue using graphic organizers to learn History.

5.3.6. Classroom participation enhancement

The students shared that the use of graphic organizers gave them the opportunity for interactions, discussion and exchange of ideas. During the interview, the students mentioned that they could not participate in the classroom activities before because they were not able to understand the lesson. Now with the help of graphic organizers they were able to comprehend the text and so could exchange their ideas with friends. This active participation in the activities built their confidence.

The researcher concluded that the use of graphic organizers enhanced students learning in History. The learning achievement of students significantly improved after the integration of graphic organizers. The students also expressed positive opinions towards use of graphic organizers to learn History.

6. Discussions

The discussion was based on two research objectives:

6.1 Research Objective 1 - To compare the learning achievement of grade seven students in History before and after the use of graphic organizers.

The findings of this study showed that the use of graphic organizers increased students’ scores in the test. It also supported the findings by Nair and Narayansamy (2016) and Chabari
(2018) which indicated that the use of graphic organizers in the classroom enhanced students’ achievement.

The use of graphic organizers in learning History had a significant effect on students’ achievement in test because it enhanced their understanding of the text of History as well as their memory retention. Many researchers had highlighted how the use of graphic organizers in the class improves learning achievement. When graphic organizers are integrated into classroom, it enhances student comprehension power of the new materials (McKnight, 2010), improves recall of information (Saynay, 2014) and promotes higher order thinking (Osborne, 2016).

All students or 100% had increased in their posttest scores in compare to the pretest scores, including those struggling learners. A student with lowest score of 3 in pretest, had scored 11.5 in posttest, an increase of 8.5 marks. Upon interview, the students responded that the use of graphic organizers helped them to understand the text easily. This finding corresponded to the findings by Train (2014) that the graphic organizers were most effective for struggling learners and also for those with learning disabilities. Hanley (2018) had also mentioned that graphic organizers could be used by all students regardless of their learning abilities.

When teachers and students jointly construct the graphic organizers, they learn from each other. Through this collaborative activity, students of all grade levels learn how to organize knowledge (Bromley, 2008). Kirschbaum (2004) states when an educators use graphic organizers, the children sees the importance of what is being taught and how information is being connected, so as a result can have an effect on their grades. Thus, like the findings of the previous researches, this study showed that the use of graphic organizers in the classroom increased the learning achievement of the students.
6.2. Research Objective 2

To find out the opinion of the grade seven students about using graphic organizers in learning History.

The instruments used for the second objective of the study were survey questionnaire and semi-structured interview. The responses from the interview supplemented the findings of the questionnaire in details. The finding showed that the students had positive opinion towards the use of graphic organizers to learn History.

According to the findings from the interview, all the students found the lessons interesting and amusing. This kind of learning was better than traditional method as it required students to participate actively during the lessons. “When we are able to understand the text, we feel motivated to learn History. It also built our confidence because we are able to take part in discussion,” was shared by most students during interviews. This finding was supported by Iltier (2016) who reported that the use of graphic organizers demonstrated positive emotions such as enjoyment, hope and pride in learning History.

Enthusiasm to participate in activities was another finding of the study. Bromley (2008) pointed out that graphic organizers promoted active learning by requiring one to read, talk, listen, think, draw, write and create. More over the constructivism theory supports, that knowledge cannot be built passively but requires active engagement in meaning making process. The use of graphic organizers engages students in the learning process independently, in peer, groups or as a whole class (Gatt & Vella, 2003). The interactive and engaging nature of graphic organizers thus help students to outgrow their learning.

The findings also showed that graphic organizers were easy to use. The students could easily use different graphic organizers for different purposes which made learning effective. For
instance, Venn diagram helps to find differences and similarities between two events, concept mapping to summarize, KWL to check prior knowledge and Timeline to record various events in chronological order. Similarly, Gallavan and Kottler (2010) suggested timeline, maps, cause and effect chart, Venn diagram to teach “Henry VIII” to students. It was found that these were valuable tools to make learning meaningful.

The easy use of graphic organizers helped the students to understand and recall the text better. This learning is supported by cognitive theory where the cognitivist believe that a person’s prior knowledge is stored in the cognitive structure of the brain. The use of graphic organizers helps to relate the new information to the prior knowledge, helping student’s process, organize and store the new information internally (Gould, 2012). The findings of this study coincided with the similar finding by Elwood (2018).

The students reported that graphic organizers helped in understanding the text better. This finding was supported by Uba, Oteikwu, Onwuka, & Abiodun-Eniayekan (2017) who stated that the students taught with graphic organizers performed better in comprehension assessment. The use of graphic organizers helped the students in comprehending the text easily by organizing and structuring the information in logical manner. The graphic organizers like conceptual map and flow chart organize the information and improved the instructions of mental modes. Through the use of graphic organizers the children learn to analyze the text meaningfully and organize the information in their mind (Hanley, 2018).

7. Conclusion

This research revealed some important findings. The use of graphic organizers in learning History improved student’s achievement scores in test. Apart from that, it enhanced students’ interest and motivation in the subject. The construction of graphic organizers in classroom engaged students actively in learning process which helped them comprehend the text
easily and retain the information for longer period. Graphic organizers were an approach which focused on learner-centered rather than the teacher-centered. However, findings revealed that the duration of the study which was only four weeks limited the students’ mastery of all graphic organizers, so, more time could be provided for students to practice.

With the constructive findings from the study, the researcher recommends that the graphic organizers should be considered as an alternative approach to enhance students learning in History. Bhutanese teachers are recommended to incorporate various graphic organizers in teaching and learning History to enhance students’ learning motivation and raise performance in the subject.

Similarly, future researchers can conduct the study with different levels of student but with larger sample size and longer duration of time. The present study focused on only five types of graphic organizers, further studies using other types can be tried out for more effective learning. A study could also be conducted to examine the effectiveness of graphic organizers in reading comprehension of History texts.

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