Enhancing Students' Critical Thinking in Writing Through Group Investigation Strategy Assisted by Digital Story Board Media

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Abstract : This research deals with classroom action research aiming to enhance students' critical thinking in writing through the application of group investigation strategies assisted by digital storyboard media. The study was carried out in cycles following Kemmis' cycle process. The subjects of this study were 33 grade X students of SMA Al-Hikmah Medan in 2019/2020 academic year. The data were collected by employing observation, field-note and writing test. After completing the study, the result shows that the implementation of group investigation strategy assisted by digital story board media significantly improved students' critical thinking in writing. This is represented by the increase of students' writing achievement, students' learning activities and teacher's performance in teaching. In the first cycle, the number of students passing the standard qualifying of writing set by the school was only 13 students (39.39 %) and improved substantially in cycle two reaching 26 students (78.79 %). The students' learning activity also progressed considerably as presented in the average score from 67.6% in cycle one to 86% in cycle two. Further, the improvement of teacher' teaching performance between cycle one and cycle two achieved 23.36% or from 66% in cycle one to 89.36%. This finding may drive instructors to adopt group investigation strategy assisted by digital story board media to enhance students' critical thinking in writing.

Keywords: *group investigation strategy, digital story board media, critical thinking, writing*

1. INTRODUCTION

In the 21st century education, critical thinking becomes one of the crucial issues echoed by education institutions over the globe with the hope that it could be advantageous for students to tackle the challenges of the newly established salad bowl and the workplace. Therefore, developing students to be able to think critically becomes a pivotal goal in this contemporary education (Tabackova, 2015; Lai, 2011). Tabackova also claims that critical thinking is not merely dealing with the ability to determine mistakes, or like or dislike expressions, but skillful in arguing fair and unbiased opinions of something.

There have a bunch of definitions of critical thinking proposed by writers, all of which emphasize the ability to evaluate and respond objectively. Open University (2008) argues that critical thinking is a skill to examine ideas, evaluate them against what have been received and decide their merits by taking into consideration of the sides of strengths and weaknesses. According to Changwong, Sukkamart, & Sisan (2018), "critical thinking is a mental process which requires individuals to actively and skillfully conceptualize, apply, analyze, synthesize, and evaluate information to reach an answer or conclusion". Zulfaneti, Edriati & Mukhni (2018)

defines that critical thinking is a process of evaluation or decision-making which is full of consideration and is carried out independently. Furthermore, Murawski (2014) states that the objective of critical thinking is to exercise a way of contemplating more profoundly, resolving problems in finer ways, communicating, collaborating and innovating more effectively in personal and organizational lives. Contrarily, it is not a practice of criticizing something in wrong modes. Critical thinking in learning is reasonably beneficial to encourage the other skills. Hall (2017) infers that thinking critically helps develop academic performances, particularly writing skill. Critical thinking directly contributes to growth in persuasive writing skill and develops capabilities that transfer across the curriculum and into the real world (Hughes, 2000).

Writing is one of the fundamental skills in encouraging students' critical thinking skills. Al Sharadgah (2014) claims that students' critical thinking can be developed through writing programs. Therefore, critical thinking and writing skill are bound to one another. Hansen (2011) also states that writing skill can be the ticket to better grades and greater academic achievement. Therefore, to produce quality writing, students should consider several aspects. According to Harmer (2004), "there are four stages to create a good writing, they are planning, drafting, revising, and editing. Writing is significantly essential because of its extensive purposes in higher education and in the workplace". For professional stages, communication is formally realized through proposals, memos, reports, application, preliminary interviews, e-mails, and more are parts of everyday lives of students and successful graduates (Walsh, 2010). In addition, writing brings about a lot of advantages. It helps express one's personality, foster communication, develop thinking skills, make logical and persuasive arguments, give a person a chance to later reflect on his/her ideas and re-evaluation provide and receive feedback and prepare for school and employment (Chappell, 2011).

However, most students still struggle to communicate their thoughts in writing. The intricacy of writing is drawn by several reasons. Toba, Noor, & Sanu (2019) identify that the main obstacle of students' writing ability deals with their limited knowledge of writing aspects. Besides, personal reasons such as, lack of writing practice, dislike writing, writing anxiety, negative writing perception, low writing motivation, and insufficient time are also other factors bringing about the difficulty. Ariyanti & Fitriana (2017) resumed that Indonesian university students were in adversity in employing grammar, cohesion, coherence, paragraph organization, diction, and spelling errors in writing. Huy (2015) also revealed that students' mistakes in writing were influenced by a lack of grammatical understanding and materials for research. Similarly, Belkhir & Benyelles (2017) in their study concludes that EFL learners encounter writing difficulties in both coherence and cohesion because of the lack of reading.

Apart from that, students' challenge in writing is also intervened by teaching activities managed by teachers. Teaching strategies applied by teachers in teaching the writing materials cannot boost students' motivation and understanding to cope with all aspects related to writing, namely grammar, vocabulary, generic structures of an essay, and so forth. Adas & Bakir (2013) contemplates that the methods of teaching English which employ native language (Arabic) as the medium of instructions impacted on the students' weakness in writing. The use of a single teaching technique also contributes to the challenge of teaching writing; consequently, teachers must always apply a combination of these approaches simultaneously (Almubark, 2016).

With regards to the emergence of writing challenges met by students, it is indispensable that teachers have need of applying alluring techniques in teaching writing. One of the teaching strategies considered feasible to promote vibrant teaching atmospheres is group investigation

strategy (GIS). Purwananti (2019) believes that group investigation strategy could encourage students to collaborate with class fellows and learn the "how" of their own in accordance with the cognitive style of each. She also claimed that GIS offers students' chances to argue, think critically and increase their knowledge, abilities, and skills totally in an open and democratic learning environment. Iswardati (2016) believes that GIS strives peer-tutoring from brainy students who understand the answer to other peers who do not. Further, the implementation of appealing strategy integrated with learning media such as digital storyboard. Hasan & Wijaya (2016) voice that storyboard is fruitful to develop students' learning motivation and their writing skills. The advantages of storyboard can be caught by the teacher and students as well; (a) the meaning of story can be conveyed in chronological order, (b) the material can be demonstrated by retelling the story through a combination of words and imageS and (c) an alternative way of which students can struggle with literacy and writing skills (Clabough, 2011). Therefore, this research aims at unpacking how the students' critical thinking in writing can be developed through learning using group investigation strategies assisted by digital storyboard media.

is considered important to be carried out to measure how to improve students' critical thinking by teaching using x

2. METHOD

This study deals with classroom action research where the study was imposed by the teacher herself. This action research was conducted through Kemmis' approach through cycles. Each cycle included four steps namely planning, implementing/acting, observing and reflecting.
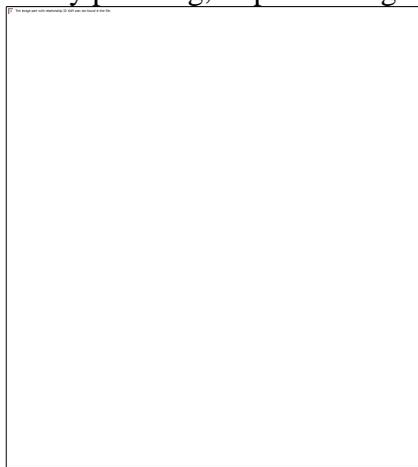
Fig. 1 Action Research Cycle

This research subject belonged to 33 students of grade X SMA Al-Hikmah. The reason of choosing the school as the setting of this study was that the students met trouble in learning writing especially narrative text. The data were collected through three different techniques; observation and field-note aiming to gain the data on students' learning activities & teacher's teaching performance, and test used to evaluate students' writing. The students' writing was scored based on the aspects; content, organization, vocabulary, language use and mechanical skill. To find out

the number of students passing the test, the formula: $P = \frac{R}{T} \times 100\%$ was used, where P is the percentage, R is the number of students getting the score and T is defined as the total number of students. Students' learning activity was analyzed through the aspects of oral activity, listening activity, writing activity, mental activity and emotional activity. Further, teacher's teaching performance was measured by the following components; the ability to do apperception, explain material, explain learning methods, divide groups, manage discussions, giving questions or quizzes, evaluate give rewards, determine students' scores, conclude learning material and close the learning process.

3. RESULT AND DISCUSSION

a. Finding
Preliminary Test

A preliminary writing test was conducted before the first cycle was started to find out the students' level of competence in writing narrative . In the test, the students were assigned to write a narrtive text. The result indicated that score 90 categorized as excellent was achieved by 6 students (18.19%) of the total, 75 categorized as good was achieved by of 7 (21.21%) students and 50 categorized as poor was attained by (60.60%) or 20 students of the total. It implies that the students' achievements in writing were in general scored low. There were only 39% or 7 out of 33 students fitting the targeted score. The detail was presented as follows.

Table 1
Students' Preliminary Test Result

Level of Competence	Number of Students	Percentage
Excellent	6	18.19%
Good	7	21.21%
Poor	20	60.6%
Total	33	100%

Cycle 1

Before working on the action, the researcher arranged the preparation including lesson plan and teaching materials. The researcher also prepared the instrument of collecting data, such as observation sheets, field note and test. In the first cycle, the research was held in two sessions (2x45 minutes). The learning activity in this cycle was implemented in accordance with the designed plan at the planning stage. The first stage, the teacher briefly explained the procedure of the group investigation strategy along with the use of digital storyboard media. Before the teaching and learning process began, the students were then divided into five groups. Each group consisted of 6 or seven students. One student in each of groups was appointed as the leader. After the group formed, the teacher described the objectives of the material. In whilst teaching, the teacher collaborated with researchers implemented group investigation strategy assisted by digital storyboard with the following steps; identifying the topic, carrying out group discussion about the

topic in groups, reporting the group investigation of the learning materials, and evaluating the group discussion.

The data obtained in the first cycle were analyzed to investigate the improvement of students' skill in writing narrative text and the process of teaching and learning using the group investigation strategy facilitated with storyboard media. As regards with the students' writing ability, their writing was then evaluated based on the aspects of writing assessments; content, organization, vocabulary, language use and mechanical skill. In the first cycle, the data showed that students 'achievement in writing narrative text improved compared to the preliminary test. The number of students who achieved a score of 95 (excellent) was 6 students or 18.19%, 14 (42.42%) students reached 80 which were categorized good and 13 (39.39%) of them scored 50 categorized as poor.

Table 2
Students' Writing Achievement in Cycle 1

Level competence	Number of Students	Percentage
Excellent	6	18.19%
Good	14	42.42%
Poor	13	39.39%
Total	33	100%

The above data indicate that students' achievement in writing narrative text developed. It was verified by the percentage of students who achieved scores in the range of 80-90 categorized good increased at 60.60% or 20 students. The details were presented in following the table.

Table 3
Number of Students Completing Test in Cycle 1

Value	Number of Students	Percentage	Description
≤ 70	13	39.39 %	Not complete
≥ 70	20	60.6 %	Complete

In addition to the observation on the teaching and learning processes, it appeared that the learning experiences who implemented group investigation supported by digital storyboard became more energetic. The students were more active to participate in the learning activities. The students' participation was evaluated based on the criteria of interest, attention, participation and presentation. The following table summarized the result of observation of students' activities in learning process.

Table 4
Students' Activity in the Learning Process in Cycle 1

No	Aspects of Observation	Score
1	Oral activity	70%
2	Listening activity	63%
3	Writing activity	70%
4	Mental activity	72%
5	Emotional activity	63%
	Mean	67.6%

The data above shows that students' learning activities using group investigation strategies and story board media achieved an average score of 67.6% with details of 63% for both listening and emotional activities, 70% for writing and oral activities, and 72% for mental activity. Students' participation in learning was considered the highest level compared to other aspects. Students were enthusiastic to answer questions from the teacher when the teacher asked their opinion about narrative text. Meanwhile, the lowest was the aspect of interest. It was because students were not interested in responding tasks given to them. The students were preferable to answer the questions indirectly.

The teacher's performance in teaching also seemed more dynamic. The teacher provided more students opportunities to discuss and share with their team members. The teaching strategy boosted students to be enthusiastic about taking part in the learning process. However, the teacher's capability of managing the class through the use of the teaching strategy still met challenges. The teacher's performance was assessed from aperception, explaining material, explaining the learning method, technique of dividing group, managing discussion, giving question or quiz, ability to evaluate and giving rewards to individual or group. The detailed assessment of teacher's performance in the teaching process is presented below.

Table 5
Score of Teacher's Teaching Performance in Cycle 1

No	Activity	Score	Category
1	Apperception	80%	
2	Explaining material	75%	
3	Explaining learning method	78%	
4	Technique of dividing group	60%	
5	Managing discussion	85%	Highest
6	Giving question or quiz	70%	
7	Ability to evaluate	65%	
8	Giving reward to individual or group	47%	Lowest
9	Determining students' score	55%	
10	Concluding learning material	53%	
11	Closing the learning process	58%	
	Means	66%	

It donates that the teacher's ability to organize the teaching and learning activities through the implementation of group investigation strategy assisted by digital story board media looked relatively low with the average score of 60%. Over the criteria of teaching performance assessment, the aspect of managing the discussion becomes the best in comparison with the other aspects at 85% followed by apperception and explaining learning method at 78% and 75% respectively. Contrarily, the teacher's ability to give reward, determining score, dividing learning group and concluding materials still needs to be improved.

Cycle 2

In the second cycle, the planning and the action were a follow up of obstacle encountered in the previous cycle. The planning was organized based on the challenges reflected in the cycle one. The result of reflection was then used as a reference in compiling the learning activities in the following cycle two. The aim of this stage is to improve the teaching and learning activities indicated from the assessment criteria. The implementation of action in the second step was principally similar to the action of the first cycle. At the beginning of learning process, the technical description of the teaching strategy of group investigation was elaborated to help to be more familiar with the steps of learning being carried out.

In the second cycle, the observation towards students' learning activities was also based on the four aspects; interest, attention, participation and presentation. As a result, there was a significant improvement on the students' learning experience during the cycle two as represented in the finding below.

Table 6
Students' Activity in the Learning Process in Cycle 2

No	Aspects of Observation	Score
1	Oral activity	94%
2	Listening activity	86%
3	Writing activity	84%
4	Mental activity	92%
5	Emotional activity	74%
	Mean	86%

The above data indicated that the increase in the student learning activities occurs in all four aspects, with the highest score being the aspect of oral activity achieving 94%, in contrast, emotional activity only reached 74% as the lowest. The improvement also appeared in other three aspects. The students were enthusiastic to involve in responding the lesson exposed by the teacher. The students became more viable to take part in the learning process during the presentation sessions. They were more active to give questions and responses to questions given. Similarly, the students looked spirited in writing practices. On the whole, the enthusiasm of students in learning in the second cycle experienced a notable increase. It was proved from the increase in the average score of student learning activities in the cycle two reaching at 86%.

Regarding the performance of teacher in class, the teacher's talent to manage the class through the practice of the group investigation assisted by digital story board media progressed considerably. The advance of teacher's capability of handling the class can be monitored in the table as follows.

Table 7
Teacher's Teaching Performance in Cycle 2

No	Activity	Percentage
1	Aperception	90%
2	Explaining material	85%
3	Explaining learning method	95%
4	Technique of dividing group	90%
5	Managing discussion	84%
6	Giving question or quiz	89%
7	Ability to evaluate	90%
8	Giving reward	95%
9	Determining students' score	90%
10	Concluding learning material	85%
11	Closing the learning process	90%
	Means	89.36%

In details, the potentials of teacher to accommodate the students applying group investigation assisted by digital storyboard became much better. In the process of apperception, the teacher was capable of triggering students to pay attention to students and flash back the previous materials. In this stage, the teacher was agile to attract students' attention to begin the next materials as well. The teacher's skill to manage the apperception reached 90%. Substantial improvements also occurred in three other components with the same percentage of achievement; technique of dividing group, ability to evaluate and closing the learning process. Furthermore, the competences of teacher to explain the learning method and give the rewards enhanced remarkably attaining 95%. Besides, the success of teacher in implementing the learning method was also represented in three other aspects, including explaining material, managing the discussion, giving question or quiz and concluding the learning material with the percentage of achievement ranged from 84% to 89%. Overall, the teacher's success rate in managing the learning process by carrying out group investigation assisted digital storyboard media grew substantially with the average percentage at 89.36%.

Significant impact was also reflected in the development of students' skills in writing narrative text. In cycle two, students had been well-trained to organize their ideas in writing the narrative text. They had been able to produce well-arranged sentences and chronological orders of ideas. This achievement was corresponding to their writing scores. 12 (33.36%) out of 33 students achieved 95 categorized as excellent and 14 students (42.42%) attained 85 which was classified as good. Meanwhile, 7 students (21.21%) characterized as poor.

Table 8
Students' Writing Achievement in Cycle 2

Level competence	Number of students	Percentage
Excellent	12	36.36%
Good	14	42.42%
Poor	7	21.21%
Total	33	100%

The results of the students' writing test in cycle two designated there were 26 students (78.79%) who achieved the minimal score set by school (70). In contrast, 7 of them received the score under 70.

Table 9
Number of Students Completing Test in Cycle 2

| Value	Number of Students	Percentage	Description
≤ 70	7	21.21 %	Not complete
≥ 70	26	78.79 %	Complete

b. Discussion

This is a classroom action research dealing with the improvement of students' critical thinking in writing narrative text. Before this study was carried out, a preliminary test was held to investigate students' critical thinking in writing a narrative text along with the obstacles faced by students. The students' problems were also gained from researcher's experience during the internship. The challenges faced by students are not only related to the ability of constructing grammatical sentences, but also related to their ability to generate ideas and arrange them coherently. Based on the preliminary test, students were not qualified yet to produce a systematic writing of narrative text. The result of the test showed that there were only 6 out of 33 students achieved excellent grade and 7 students gained good grade, whereas, most of them or 20 students were still struggling with the test. In other words, there were only 39.40% of students could drive the writing, while 60.6% of them still needed to work hard to tackle the problems of the writing.

Regarding the above issues, the students' motivation and interest in writing narrative text were considered as the primary factors. One effective strategy that can be proposed to resolve the matters is the implementation of appropriate method. One of the strategies for this goal is group investigation. Group investigation is helpful to achieve the students' learning goal by attaining group learning goal through the activities of collecting, analyzing, and synthesizing information in order to solve a multi-task problem (Slavin, 2008). To attain more engaging learning activities, the strategy was collaborated with learning media – digital storyboard media. One of the advantages of using storyboard is that it allows users to experience changes in the storyline to trigger deeper reactions or interests. The stories lined in each board helped students developed their understanding to organize the stories sequentially.

The implementation of group investigation strategy assisted by digital storyboard media was greatly impactful on the increase of students' critical thinking in writing narrative text. In

cycle one, the students' skills in writing the narrative text improved far better. The test results revealed that the number of students who passed the minimum mastery criteria – called Kriteria Ketuntasan Minimal (KKM) of 75 increased to 20 students or 60.61% compared to the initial test which was only 13 students or 39.39%. If 75% of the total students had not reached the score of the 75 then the classical completeness were not be fulfilled, therefore, it was continued in cycle two. In cycle, students were treated with the similar strategy and learning media modified based on the reflection in the cycle one. In the second cycle, the students' grades had a very satisfying improvement. Most of the students (78.79%) completed the test. The progress of students' critical thinking in writing the narrative text is displayed in the below chart.

Chart 1
Students' learning completeness diagram on the preliminary test, Cycle I and Cycle II
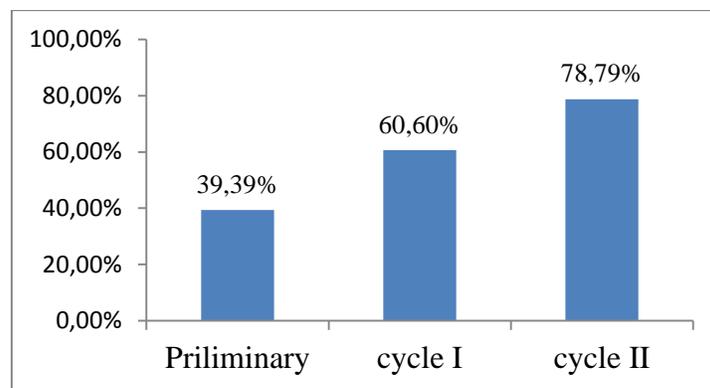
The use of group investigation strategy and digital storyboard media was likewise potent to engage the students to be more actively involved in the learning process. As presented in the cycle 1, the average percentage of students' involvement appraised from five aspects including oral activity listening activity, writing activity, mental activity and emotional activity was 67.6%. This figure shows that the practice of group investigation and digital storyboard media in the first cycle have not been able to successfully invite students to take part in the learning process. It seemed that students were not accustomed to conduct collaborative learning activities through the learning strategy. They tended to work on the tasks individually. These facts became a reference for the teacher to design the teaching strategies in the next cycle. In the cycle two, the teacher's teaching performance appeared more active and dynamic, therefore, the students more relaxed to keep up with the teacher. Their interest and attention with the learning increased. This could be kept track of the students' activities in giving questions and responding to questions or cases that arouse. In addition, students' participation in group presentation was increasingly active. Each student had a role in the presentation session. Based on the data, the student learning activity in the cycle two mounted to 86%. It meant that the increase of students' activities in learning between cycle one and cycle two reached 18.4%.

Chart 2
Comparison of Student's Activity in the Learning Process between Cycle 1 and 2
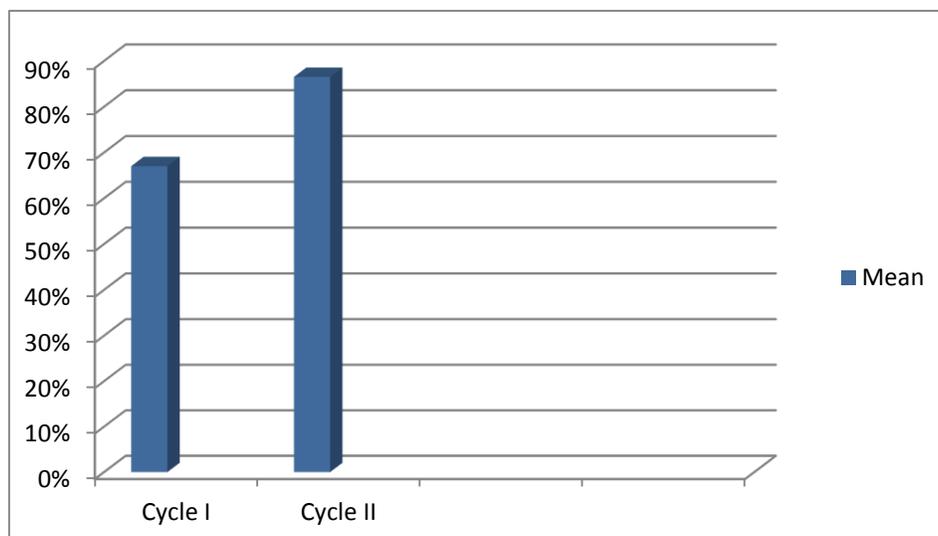
Looking at the teacher's teaching performance, the application of group investigation strategy collaborated with digital story board media was successfully effective to develop the potentials of teacher in designing a more fascinating teaching. The ability of teacher to perform to the teaching was measured from the following aspects; apperception, explaining material, explaining learning method, dividing group, managing discussion, giving question, ability to evaluate, giving reward, determining students' score, concluding learning material and closing learning process. In the first phase, the learning atmosphere created by the teacher using the group investigation and digital story board media impressively triggered students to follow the class. It was the fact that the teacher still experienced hindrances, particularly when managing the discussion and presentation, and diving the groups. The teacher was not accustomed to giving students more opportunities to experience the learning processes. In other words, the teacher still dominated the class. The teacher's ability to manage classes rated from the average score of teaching performance only reached 66% in the cycle one. However, a high growth occurred in the cycle two. The success of teacher in performing the teaching in the second phase was rated at 89.36%, an increase of 23.36% between cycle one and two.

Chart 3
Comparison of Teacher's Teaching Performance between Cycle 1 and 2

Series 1
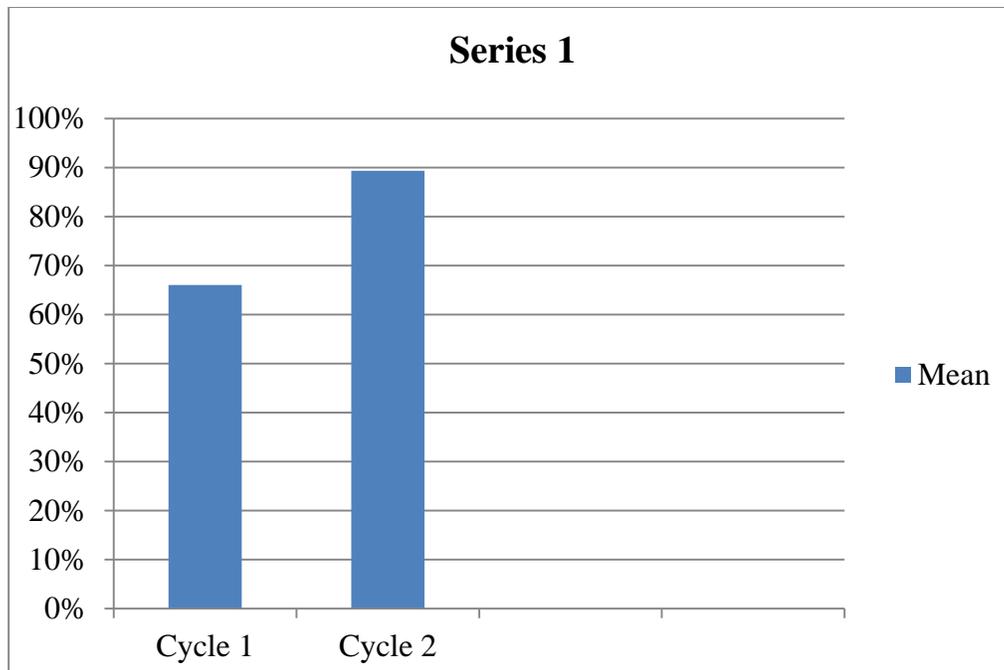
4. CONCLUSION

The implementation of group investigation strategy and digital story board media was significantly influential towards the success of the learning process. After completing the study, it can be inferred that the students' learning activity in the class through group investigation and digital story board media improved substantially. Further, the teacher's teaching practices also changed to become much better. This successful practice of teaching consequently affected the students' achievement in writing the narrative text. There were more than 75% of the students out of the total passed the minimum mastery criteria of 75. Therefore, group investigation strategy and digital story board improved students' critical thinking in writing.

5. REFERENCE

Adas, D., & Bakir, A. (2013). Writing Difficulties and New Solutions: Blended Learning as an Approach to Improve Writing Abilities. *International Journal of Humanities and Social Science*, *3*(9).

Al Sharadgah, T. . (2014). Developing Critical Thinking Skills through Writing in an Internet-Based Environment. *International Journal of Humanities and Social Science*, *4*(1).

Almubark, A. A. (2016). Exploring the Problems Faced by the Teachers in Developing English Writing Skills for the Students in Saudi Arabia. *International Journal of English Language Teaching*, *4*(10), 10–23.

Ariyanti, A., & Fitriana, R. (2017). EFL Students' Difficulties and Needs in Essay Writing. *Advances in Social Science, Education and Humanities Research (ASSEHR)*, *158*(International Conference on Teacher Training and Education 2017).

Belkhir, A., & Benyelles, R. (2017). Identifying EFL Learners Essay Writing Difficulties and Sources: A Move towards Solution. The Case of Second Year EFL Learners at Tlemcen University. *International Journal of Learning, Teaching and Educational Research*, *16*(6), 80–88.

Changwong, K., Sukkamart, A., & Sisan, B. (2018). Critical Thinking Skill Development: Analysis of a New Learning Management Model for Thai High Schools. *Journal of International Studies*, *11*(2), 37–48. https://doi.org/10.14254/2071-8330.2018/11-2/3

Chappell, V. (2011). *What Makes Writing So Important?* Www.Scribd.Com. http://www.marquette.edu/wac/WhatMakesWritingSoImportant.shtml.

Clabough, J. (2011). Paneling History: Using Storyboards to Engage Students in the Social Studies Classroom. *North Carolina Middle School Association Journal*, *26*(1).

Hall, S. . (2017). Practise Makes Perfect: Developing Critical Thinking and Effective Writing Skills in Undergraduate Science Students. *3rd International Conference on Higher Education Advances*, 1044–1051. http://dx.doi.org/10.4995

Harmer, J. (2004). *The Practice of English Language Teaching*. Pearson Education.

Hasan, D. N., & Wijaya, M. S. (2016). Storyboard in Teaching Writing Narrative Text. *Jurnal Tadris Bahasa Inggris*, *9*(2), 262–275.

Hughes, C. E. (2000). A Comparative Study of Teaching Critical Thinking through Persuasive Writing to Average, Gifted and Students with Learning Disabilities. *Dissertations, Theses, and Masters Projects*. https://dx.doi.org/doi:10.25774/w4-gd7s-jy96

Huy, N. T. (2015). Problems Affecting Learning Writing Skill of Grade 11 at Thong Linh High School. *Asian Journal of Educational Research*, *3*(2). https://doi.org/2311-6080

Iswardati. (2016). *The Implementation of Group Investigation to Improve the Students' Speaking Skill*. *16*(2).

Murawski, L. M. (2014). Critical Thinking in the Classroom and Beyond. *Journal of Learning in Higher Education Spring*, *10*(1).

Purwanti, A. R. (2019). Evaluation on an ESP Course Book: Get Along with English for the Hotel Industry. *Journal of English Educators Society*. https://doi.org/10.21070/jees.v4i2.2432

Rodríguez, M. P. H., Varela, J. M. R., & Leyva, E. A. (2018). *Perception Analysis of Potable Water Service to Users*. *3*.

Tabačková, Z. (2015). Outside the Classroom Thinking Inside the Classroom Walls: Enhancing Students` Critical Thinking through Reading Literary Texts. *5th World Conference on Learning, Teaching and Educational Leadership, WCLTA 2014. Elsevier. Procedia - Social and Behavioral Sciences*, *186*(2015), 726 – 731.

Toba, R., Noor, W. N., & Sanu, L. . (2019). The Current Issues of Indonesian EFL Students' Writing Skills: Ability, Problem, and Reason in Writing Comparison and Contrast Essay. *Dinamika Ilmu*, *19*(1). doi: http://doi.org/10.21093/di.v19i1.1506

University, O. (2008). *Think Critically*. Licensing Agency.

Walsh, K. (2010). *The importance of writing skills: Online tools to encourage success*. http://www.emergingedtech

Zulfaneti, E. & M. (2018). Enhancing Students' Critical Thinking Skills through Critical Thinking Assessment in Calculus Course. *Journal of Physics*, *948*(2018). https://doi.org/10.1088/1742-6596/948/1/012031