The Effectiveness of Mind Mapping For Writing Procedure Text By Using Instagram

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INFO ARTIKEL	ABSTRAK
	Abstract: The students should master four basic skills in English, such as listening, reading, speaking, and writing. Writing is one of students' basic skills to master especially in writing procedure. There are some technique and media to teach in the class. One of the techniques is mind mapping and the media is Instagram. The students learn about procedure text by using mind mapping and Instagram, it could give motivation to improve their writing. This research used quasi-experimental design. It was conducted in SMKN 1 Lamongan. The population of this research is tenth grade. The samples were tenth AKL 1 and tenth AKL 2 the total samples were 68 students with non-equivalent control group design. The result of t-test calculation was 2.897 with t-table =1.67 at 5% level sig and t-table 2.38 at 1% level of si withdf 66, t-observed = 2.93 higher than t-table = 1.67 = 2.38. It means that t-test is higher than t-table. So, it is significant. It can be concluded that there is significant effect of mind mapping for writing procedure text by using Instagram of Tenth AKL SMKN 1 Lamongan in academic year 2022/2023. **Abstrak:** Para siswa harus menguasai empat keterampilan dasar dalam bahasa Inggris, seperti mendengarkan, membaca, berbicara dan menulis. Menulis merupakan salah satu keterampilan dasar yang harus dikuasai siswa terutama dalam prosedur menulis. Ada beberapa teknik dan media untuk mengajar di kelas. Salah satu tekniknya adalah mind mapping dan medianya adalah Instagram. Para siswa belajar tentang teks prosedur dengan menggunakan mind mapping dan Instagram, dapat memberikan motivasi untuk memperbaiki tulisan mereka. Penelitian ini menggunakan desain eksperimen semu. Itu dilakukan di SMKN 1 Lamongan. Populasi penelitian ini adalah siswa kelas X. Sampel yang digunakan adalah AKL 10 dan AKL 2 dengan jumlah sampel 68 siswa dengan desain non-equivalent control group design. Hasil perhitungan uji-t adalah 2,897 dengan t-tabel = 1,67 pada taraf sig 5% dan t-tabel 2,38 pada taraf 1% dari si dengan df 66, t-teramati = 2,93 lebih tinggi dari t-tabel = 1,67 = 2,38. Artinya t-test lebih tinggi dari t-tabel. Jadi, ini signifikan. Dapat disimpulkan bahwa terdapat pengaruh yang signifikan mind mapping terhadap penulisan teks prosedur dengan menggunakan Instagram AKL X SMKN 1 Lamongan tahun ajaran 2022/2023.

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PENDAHULUAN

The world of education in the era is needed to prepare students who can show their superiority, it is intelligence, personality, and spiritual character. According to (Indonesia, 2003) on National Education System as quoted by (Farih & Dewi, 2021); Education is conscious and well-planned effort in involving learning environment and learning process in order who learners are going to be ready to improve their potential in the acquiring spiritual and non-secular strengths, self- control developing, personality, intelligence, morals, and good character and skills which needs for him/herself, for the community, for the nation, and the State.

The students are required to master four skills in English, they are speaking, listening, writing and reading. There are some types of text that is learned by the students, such as descriptive text, narrative text and procedure text. In procedure text the students have to be able to tell the steps well to give a guide to the reader. According to (Sholah & Bunyani, 2017) to good writing, people must have the go in writing skill, even people who will write the essay or story must know the steps process and aspects in writing. In daily life, writing can be used to communicate such as writing a letter, story, and short messages. Writing activity is using a sentence and it must be clear so that the students will be able to understand easily. It means every students should master four skills naturally appear together in every English class, so, they are able to communicate and share the message effectively.

The students have difficulties skills to master writing contains multiple problem elements such as language, spelling, vocabulary, and punctuation. To create ideas, words, sentences and paragraphs require thinking hardly to write. (Richards & Renandya, 2002) they explain that writing is the the most difficult skill for second language or foreign language learners. It does not only have problem in organizing and generating ideas, but also difficulty in translating ideas that can be read the text. Therefore, writing has comparison to other skills like speaking, reading and listening. In studying English, students' skill in writing is an essential thing which influence students' ability to improve their writing ability.

In genre-based approach, writing is integrating the knowledge of a particular genre and its communicative purpose, it helps learners to produce their writing products to communicate to others in the same discourse community (Farih, 2023) in learning English, the students will learn in some types of text, like descriptive text, recount text, procedure text and narative text. Procedure text is a form of English text which explains the steps to do something. The procedure text is one of the texts studied in the tenth grade of grammar school. The first grade face many problems in writing English text, especially in procedure text. The first problem is most of students have lack vocabulary, the second is arranging the steps and choosing the topic. The students are still afraid to make sentence which makes harder for them to write. The students were bored and less interested in learning how to write procedure text in traditional technique.

Traditional technique for writing procedure text using mind mapping is drawing on paper. Therefore, teachers need to choose their creative learning strategies and media to make them easy to understand and enjoyable. Especially the teacher should know that hold the subject do not use mind mapping with Instagram in English class, most of students are using Instagram and they are active users, so that the writer chooses Instagram as media to upload mind mapping. According to problem above, it is interesting to find out the solution by using mind mapping in Instagram to improve students' procedure text.

Mangubhai and Pritchard in (Prawati et al., 2018) they concluded that sequencing is very essential in both telling how to process and reporting procedure. Therefore, they avoid writing in English, avoid selecting tasks altogether, and need learning media to help writing procedure text. For these reasons, the writer wants to know how effective mind mapping is as a medium for writing procedure texts.

Instagram is a mobile application that allows users to capture and share images and videos with followers. Instagram is one of platform in the social media which can be used as an educational medium attract students' attention in learning process. Social network is something important in student's daily life. It can interact by direct message or video call, share the stories with others, upload pictures with captions (Alhabash & Ma, 2017). Therefore, the writer used Instagram as a medium for procedure text learning. In general, they upload photos and videos with explanations or captions, leave comments, send direct messages, and interact with others. Instagram is more effective writing medium for students and can help students in English classes, especially when writing procedure text. The study conducted by Russmann & Svensson,(2016) entitled: Instagram is a platform to improve students' writing ability proved that using Instagram could help

the students in developing their writing ability in terms of new vocabulary. Instagram has a lot of features and functions to support students' interest in writing.

One of the benefits of using Instagram as social networking to help students to improve their skills in describing or explaining gathering ideas to become a good step in procedure text (Khulel, 2022).

This problem happened to the students of SMKN 1 Lamongan especially at the tenth Accounting. The writer uses Instagram to share the mind mapping of procedure text. The writer wants to know the effectiveness of mind mapping through the student's personal experience in creating procedure text in SMKN 1 Lamongan tenth Accounting and the student's response to Mind Mapping by using Instagram.

Using Mind mapping in writing might help the teacher recognize the typical text that the students make often and faster. The writer uses this technique to enable the teacher to find out the information about writing on text of students and help them to develop their skills especially in procedure text.

So, the study of this title is "The Effectiveness of Mind Mapping for Writing Procedure Text by Using Instagram".

Definition of Writing

Writing is the process of transforming our minds and thoughts into written form. It should be divided into coherent and related paragraphs. Consistency means that sentences must be one (Oshima, 1998) The transition from one sentence to the next must be logical and smooth. It is the process of writing a language in such a way that the message is conveyed by the writer can be understood by the reader.

According to Brown (2004) Writing is a verbal transaction that frees from what the writer is thinking, feeling, and perceiving. It is the process of presenting or expressing ideas, experiences, or information in the writer's mind in the form of written language.

Writing is as important as speaking, listening, and reading. In other words, students must be able to learn how to write. Students need to know how to make literacy in writing ability well (Apriani et al., 2022). The students do not only need to write correctly, but also translate their feelings into their own writing so that the reader can feel the writer's feelings. And writing requires hours of patience to write correctly. The writer needs to invite readers to feel what is being written as part of them. For example, if a teacher gives the special topic and the students write about that topic, the student can collect and find meaningful information to connect the idea before writing the idea. After getting information and ideas, they start writing. Listening, speaking, and reading skills are the manner to search the ideas and information.

Process of Writing

Writing is a hard skill that students must master. When writing, students must face many writing processes. According to (Harmer, 2004) states that the write process is more complex. Phases are revisions to planning-drafting-editing-and publishing.

Figure 1. Process of Writing

From those we can conclude that writer must write something and go through all steps to be a good thing (Harmer, 2004). The step of process writing can be described as follows:

Planning

Planning is a write schedule. In this phase, the writer helps students identify and explain the topics used to create the object. Students are expected to develop ideas by creating charts, lists, and groups of words.

At the describing stage, students explain their ideas by writing freely, without paying attention to whether they are right or wrong. This allows the students to develop their writing as much as possible. The writer then, of course, selects the topic to write by developing interesting ideas so that students can write good texts.

Drafting

During the draft stage, students will arrange their ideas in order and adjust them to the time of the event to ensure proper spelling. When designing, students get the content of the text and write down the points and ideas. After completing several pre-writing activities, start writing the first draft. The first thing to do is clarify, start writing in introduction and conclusions, and start working on the body paragraph (Farih & Karimata, 2022).

Editing

Editing is a spelling writing phase after the process of prescription, drafting and revision, including spelling, language, and punctuation improvements. During editing, students try to write as authentic a sentence as possible to distinguish it from others. This produces excellent, perfect writing that doesn't look like anyone else.

Final Version

The writer has changed the script; make the final version with any necessary improvements. The original concept may look different, but the witer is ready to write for the reader (Harmer, 2004) it means that the writer had made changing to edit the process and already to send the text to the audience in the final version.

Procedure Text

According to Hammond and Derewiyanka 2001 in (Prawati, M. Sofian, Susilawati, 2018) procedure text is a text that inform the reader or listener how to do something by steps. Procedure text is the same such as the people's activities such as giving instructions to make something, in rules game, in recipes, manual steps.

According to Nasution, (2019) the language features of procedure text are the (1) Purpose or goal: to provide information about what the people need. In short, the procedural text is most importantly the goal or title needed to clarify what you need. (2) Material: What you need to create an object. When creating procedural text, it is the most important one because it helps us complete what we do without materials; it is difficult to take steps to achieve the result. (3) Method / Step: Information needed to create the object. Now that you know your goals and materials, you need to take a few steps to get the result. This is the last way to get the best results and make it easier to reach your goals.

Writing a procedure text can be done with the initial activity of reading instructions on the procedure for making something that is usually practiced in life (Farih, 2023). In addition, the students learn the explanation of procedure text in structure. The basic structure of procedure text has three parts. They are goals, materials, and steps. In addition, when it comes to language features, the text focuses on the average human agent. This means that the reader or the person who follows the instructions is generally. Ruswinarsih,(2015) states the language features in procedure text are:
1. Use the verbs inform to signal commands and commands such as: Pour water into the glass.
2. Use Simple Present Tense
3. Use of sequence connectors. For example, first, second, then, during, next step.
4. Use of numbers like four pencils, seven papers and others.
5. Use words, phrases, or phrases to indicate when to perform a particular step. Example: If the area is dry, write down the time it took.
6. Sometimes words, phrases, and clauses are used to indicate how to do something, or an adverb of manners. Example: Put a water in a bottle, carefully, slowly and others

Definition of Mind Mapping

The technique which helps mind to create impressions using visual image and graphic features (Rofisian, 2020). Mind mapping can be called a route map that is used by memory, it makes us to organize facts and thoughts in such a way that the natural workings of our brain involved from the start so that remembering information, it is easier than using text techniques.

In writing, the students must know what someone should write and how to get the billion ideas that create their minds. Mind mapping is the solution for most writers to come up with ideas. Mind mapping is the method that more effective than other methods because it uses two brains (Buzan, 2006).

The Types of Mind Mapping

The types of mind mapping are the first is radial mind maps, right and left-columnar mind maps (Rahmah, 2017).

1. Radial mind maps
2. Right columnar mind maps
3. Left columnar mind maps.

Technique of Using Mind Mapping

According to John Ghatland (2007) in Yulianty, (2007), The mind mapping technique starts with writing the subject or main subject on a piece of paper and put it in a circle. After that, it surrounds the other major and minor points which come to mind and connect the circle with minor line.

Mind mapping techniques is started by placing keywords or images visually to the centre in piece of paper. Mind mapping places the keywords, images, phrases, or main sentence. Then there are words, phrases, and others with a line or arrow with ideas to connect. You can use colours to encode topics and associations, and set different ideas apart from text (Buzan, 2006).

Instagram

According to Napoleon Cat in Annur, (2021) application of Instagram is one of media social which the most popular in Indonesia. There were 91.01 million Instagram users in Indonesia in October 2021. This number decreased by 7.18% compared to August 2021 which reached 98.06 million users. It is noted that most Instagram users in Indonesia are from the 18-24 years old group, which is 33.90 million.

In detail, 19.8% of the application's users are female, while 17.5% are male. in 25- 34 years old is the second Instagram user in the country. It is noted that 16.9% of female users of this application, while male is 15.3% users are recorded. Then, in 13-17 years old is the most rank users. As many as 7% of female users and 5.2% of male users. In the 35-44 years old, 6% of female users and 5.5% of male users. Meanwhile, Instagram users from the 45-54 years old are 2.2% of female and 2.1% of male. Then, in the 55-64 years old, female, and male users were 0.6%. Then, in the 65 years old and over, 0.5% of female and 0.8% of male. Overall, the majority or 53.2% of female users who shares the photo and video application in Indonesia. Meanwhile, 46.8% of male users another Instagram.

Schramm (1977) in Yunaldi & Zuwirna, (2023) states that learning media conveys a message for learning purposes. Media is a tool used to convey a message or information from a sender to a recipient. Another process of using Instagram is with some activities that can improve students' procedure writing skills. For example, enter a title.

One of the problems students face when writing is that it is difficult to come up with ideas. Instagram can be used as an inspiration to help students write. Here, teachers can post interesting pictures and ask students to write descriptive information about their comments. Pictures help students come up with ideas about what to write.

Instagram has function so that it could be used as a medium learning (Insani, 2020).

Upload photos

Instagram allows users to take pictures or import photos from camera. Users can add descriptions or captions to their photos as story what the people felt or happened When it used in process of learning a foreign language, the image can upload with feature, it is very useful for students to be able to do different learning method.

Social

On social networks, Instagram is having friends and followers. On Instagram, and user follows another user. On profile, it sees a username, profile picture, number of uploaded photos, number of followers on account, and number of followers. When a user following someone. The photo will be displayed on the home page. Others user can leave like and comment on photos.

Teaching Procedure Text Writing in Mind Mapping by Using Instagram

In this learning, the process through the media which apply by the teachers. Teachers must think about how to be effective media used in the educational process. The writers mind mapping of photos posted on Instagram as writing procedure text. With the uploaded mind mapping, the class will be more interesting (Erarslan, 2019). Instagram is as an active application as a language bridge program. In this case, Instagram is used to create some activities. The results showed that students were accepting the ideas and supported by creative writing activities' students.

METODE

The research design used a quasi-experimental study that divided two groups; one group as an experimental group that got treatment with using mind mapping and a control group without treatment. (L. B. Christensen et al., 2011) stated a design of experimental group and a non-equivalent did not give the treated comparison group, two of them which were given pre-test and post-test as measuring. Mind Mapping is an independent variable and writing procedure text is as a dependent variable. The result of two classes of the tenth of SMKN 1 Lamongan. It can find out any key differences in teaching how to write process with and without using mind mapping. Those are experimental class and control classes. However, Mind mapping was used to teach procedure writing in experimental class and it was not used in the control classroom.

Population and Sampling

Population

Population is point of all elements possessing one or more attributes of interest. In other words, we can mention that a population is the whole research subject. Sugiyono, in (Farih & Karimata, 2022) stated, "The population means generalization region consists of; objects / subjects that have certain qualities and characteristics are determined by investigators to be studied and then drawn conclusions." The population is whole subject of research. The population of this research was all students of tenth SMKN 1 Lamongan, there are seventeen classes consisting of Refrigeration and Air Conditioning Engineering, Multimedia 1 and 2, Television Program Production and Broadcasting, Automation of Office Governance 1 and 2, Institutional Financial Accounting 1 and 2, Islamic Banking 1 and 2, Online Business and Marketing 1 and 2, Hospitality 1 and 2, Catering 1 and 2, and Skin and Hair Beauty.

Sample

Sample is part of population taking using certain procedure so that it can be expected to represent its population. The researcher uses 14 students who have different English skills. According to (R. B. J. dan L. Christensen, 2014) stated that experimental study that does not provide complete control of potential mixing. Full control is not achieved because the students cannot be randomly assigned to groups. The researcher chooses control class and experiment class as like on the available classes of the twelfth-grade students of SMKN 1 Lamongan.

The sample of this research, the researcher chose two classes in Class XII AKL 1, and XII AKL 2. It consists of 35 students of control and experimental class.

Data Collection and Techniques

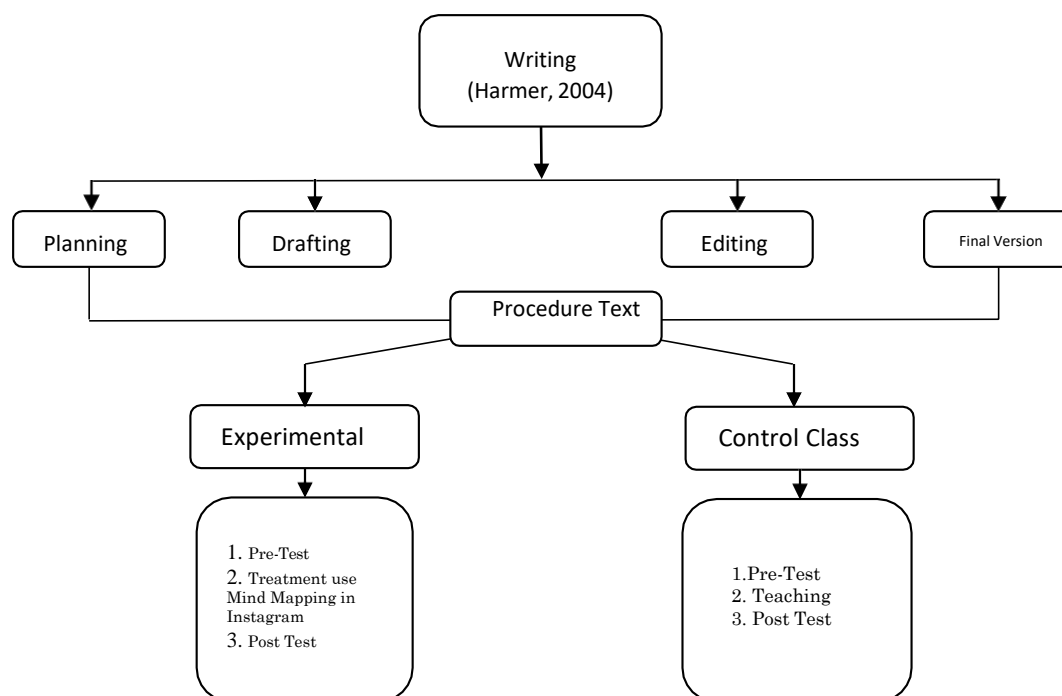The data procedure of data collection is as the followings:

Figure 2. Process of Writing

In this conceptual, this research prepared to teach materials in the form of writing in procedure text. In this process, the writers explain about writing that based on Harmer. The students must have a planning before creating the object, drafting is arranging the ideas to write editing is process from drafting or revision and final version, it is the original concept and ready to collect the task.

The writer taught the procedure text in two classes and the writers choose the experimental and control class. To measure the effectiveness of mind mapping in writing procedure text in Instagram. This study used a writing test namely pre-test and post-test.

Pre-Test

The writer gave a pre-test. It was given at the second meeting after explaining about writing. The aim to find out students' skill in writing procedure text before using mind mapping in Instagram. At this pre-test, the writer asks students to write procedure text about how to repair ATM card and SIM card. The purpose of pre-test is for giving information before treatment.

Treatment

After pre-test, the writer treated the students. The writer explained about procedure text and how to use mind mapping in Instagram application. Moreover, the writer taught procedure text and asked the students to make procedure text according to their topic and the students shared to Instagram application. After sharing the picture, the writer explains more about the material and ask students to make procedure text on their Instagram with their caption.

Post Test

It happened after a mind mapping treatment in Instagram about procedure text. To measure the changes in students' writing procedure text after giving treatment by using mind mapping in Instagram. This test is in the form that used an essay, the test is almost the same as previous test. But it has another way, The students are asked to upload their procedure text with mind mapping in Instagram. From this value, the writer specifies the effectiveness of mind mapping with Instagram application about procedure text.

Research Instruments of The Study

The research instrument is an instrument used for collecting data in research. The   instruments are used to give two tests which conducted in two meetings there are the first meeting and the last meeting. (Wijaya, 2016) These were used to measure the score students' writing skill. The test was used by the writer to measure and assess students' learning outcomes about procedure text. There are two types of tests in this study. The first is pre-test and the second is post-test. This test is an essay which is finished on form pre-test and post-test. Before doing treatment to measure students' ability, the students were given a pre-test by the teacher. While post-test evaluated the results students to show the effectiveness of mind mapping in teaching writing procedure text by Instagram.

To find out the test result, the writer used the rating rubric. In an assessment aspect are content, vocabulary, organization. These aspects have been adjusted to write procedure text.

Data Analysis Techniques

Data analysis is compiling and searching to process of systematically data obtain from data collection activities from students, data grouping, data presentation and calculations using statistic (Sugiyono, 2013). The purpose of data to test the truth hypothesis proposed in this study. SPSS (*Statistical Package for Social Science*) version 20.0 for windows. It is for statistical data processing was taking calculations. Analysis used to find a significant different in writing procedure text before and after using mind mapping in Instagram.

HASIL

Research Finding

In this study, the writer explained that research finding, results of data analysis and discussion find out the problem of study according to previous chapter. The aim of this research to find out that mind mapping is effective in teaching procedure text in Instagram or not. The data include the distribution of score before giving test in experimental and control classes as well as the distribution of scores after giving test in experimental and control classes.

The value of Pre-test in Experimental and control classes.

The value of pre test scores in experimental class

The test before giving treatment was given on 30th of March 2023 in the X AKL 1. In this result was obtained about writing procedure text in students' ability. In this analysis the pre-test and post-test were given to the students in experimental and control class. The test before giving treatment was given at X AKL 1. The students write procedure text according to the major, they were interested of shopping or buying something via online which included of goal, ingredients and steps with allocated time was 90 minutes. The writer analysed students' knowledge of procedure text before processing by calculating the mean, median, standard error of mean, mode, and standard deviation by using programs SPSS 20 as follows:

Table 1. Statistic of pre-test in experimental class score

Statistics	
Valid N	35
Missing	0
Mean	63.60
Std. Error of Mean	.860
Median	64.00
Mode	62
Std. Deviation	5.089
Variance	25.894
Minimum	55
Maximum	75
Sum	2226

According to the data the mean was 63.60, the standard error of mean was 0.860, the median was 64, the mode was 62, the standard deviation was 5.089, the variance was 25.894, the minimum of score was 55, and the maximum score was 75. The total of score was 2226.

It was data calculation that calculated in pre-test in experimental class using SPSS 20. The statistics of result show the table:

Table 2. Pre-Test Experimental in SPSS 20

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
55	2	5.7	5.7	5.7
56	1	2.9	2.9	8.6
57	2	5.7	5.7	14.3
58	3	8.6	8.6	22.9
60	2	5.7	5.7	28.6
61	1	2.9	2.9	31.4
62	5	14.3	14.3	45.7
64	3	8.6	8.6	54.3
65	4	11.4	11.4	65.7
66	2	5.7	5.7	71.4
67	3	8.6	8.6	80.0
69	1	2.9	2.9	82.9
70	4	11.4	11.4	94.3
72	1	2.9	2.9	97.1
75	1	2.9	2.9	100.0
Total	35	100.0	100.0	

The table explained that pre-test experimental class score using SPSS 20. The table showed that there was one person who got value 56 (2.9%), 61 (2.9%), 69 (2.9%), 72 (2.9%), 75 (2.9%).

There were two people who got value 55 (5.7%), 57 (5.7%), 60 (5.7%), 66 (5.7%). There were three people who got value 58 (8.6%), 64 (8.6%), 67 (8.6%).

There were four people who got value 65 (11.4%), 70 (11.4%). There were five people who got value 62 (14.3%).

The value pre-test in control class

The pre-test was conducted on March of 29th 2023 in the X AKL 2. The students are asked by the teacher to write procedure text according to the major, they were interested of shopping or buying something via online which included of goal, ingredients and steps with allocated time was 90 minutes. The writer analysed the student's knowledge of procedure text by using SPSS 20 program to calculate the mean, median, standard error of mean, mode, and standard deviation such as table 3:

Table 3. Statistic of Pre-test Control Class

Statistics	
Valid N	33
Missing	0
Mean	64.18
Std. Error of Mean	.779
Median	65.00
Mode	68
Std. Deviation	4.475
Variance	20.028
Minimum	52
Maximum	70
Sum	2118

The data explained that mean was 64.18, standard error of mean was 0.779, the median was 65, the mode was 68, the standard deviation was 4.475, the variance was 20.028, the minimum of score was 52, the maximum score was 70 and the total of score was 2118.

It was data calculation that calculated in pre-test in experimental class using SPSS 20. The statistics of result show the table of 4:

Table 4. Pre-Test control class in SPSS 20

		Frequency	Percent	Valid Percent	Cumulative Percent
	52	1	3.0	3.0	3.0
	54	1	3.0	3.0	6.1
	56	1	3.0	3.0	9.1
	60	4	12.1	12.1	21.2
	61	2	6.1	6.1	27.3
	62	1	3.0	3.0	30.3
	63	2	6.1	6.1	36.4
Valid	64	2	6.1	6.1	42.4
	65	4	12.1	12.1	54.5
	66	2	6.1	6.1	60.6
	67	3	9.1	9.1	69.7
	68	6	18.2	18.2	87.9
	69	3	9.1	9.1	97.0
	70	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

The table explained that pre-test control class score using SPSS 20. The table showed that there was one person who got value 52 (3%), 54 (3%), 56 (3%), 62 (3%), 70 (3%).

There were two people who got value 61 (6.1%), 63 (6.1%), 64 (6.1%), 66 (6.1%). There were three people who got value 67 (9.1%), 69 (9.1%).

And there were four people who got value 60 (12.1%), 65 (12.1%). There were six people who got value 68 (18.2%).

The value of post test scores in experimental class

The post-test was conducted on 18th May 2023 in the X AKL 1. In this study the students wrote a procedure text considered of their major which included the goal, ingredients, and steps which the class was given time 90 minutes. In this analyse the knowledge of procedure text after treatment. Mind mapping was used as a technique with calculating the mean, median, standard error of mean, mode and standard deviation using SPSS 20 program as table of 5.

Table 5. Statistic post-test of Experimental Class.

Statistics	
Valid N	35
Missing	0
Mean	86.26
Std. Error of Mean	.903
Median	87.00
Mode	85a
Std. Deviation	5.343
Variance	28.550
Minimum	77
Maximum	95
Sum	3019
a. Multiple modes exist. The smallest value is shown	

The data explained that mean was 86.26, standard error of mean was 0.903, the median was 87, the mode was 85, the standard deviation was 5.343, the minimum of score was 77, the variance was 28.550, the maximum score was 95 and the total of score was 3019. It was data calculation that calculated in post-test in experimental class using SPSS 20. The statistics of result show the table of 6:

Table 6. Post-test of experimental class in SPSS 20

		Frequency	Percent	Valid Percent	Cumulative Percent
	77	1	2.9	2.9	2.9
	78	2	5.7	5.7	8.6
	79	2	5.7	5.7	14.3
	80	3	8.6	8.6	22.9
	82	2	5.7	5.7	28.6
	83	1	2.9	2.9	31.4
	84	1	2.9	2.9	34.3
	85	4	11.4	11.4	45.7
	86	1	2.9	2.9	48.6
Valid	87	2	5.7	5.7	54.3
	88	4	11.4	11.4	65.7
	89	1	2.9	2.9	68.6
	90	2	5.7	5.7	74.3
	91	2	5.7	5.7	80.0
	92	3	8.6	8.6	88.6
	93	1	2.9	2.9	91.4
	95	3	8.6	8.6	100.0
	Total	35	100.0	100.0	

The table explained that pre-test control class score using SPSS 20. The table showed that there was one person who got value 77 (2.9%), 83 (2.9%), 84 (2.9%), 86 (2.9%), 89 (2.9%), 93 (2.9%).

There were two people who got value 90 (5.7%), 91 (5.7%), 78 (5.7%), 79 (5.7%), 82 (5.7%), 87 (5.7%).

There were three people who got value 80 (8.6%), 92 (8.6%), 95 (8.6%). And there were four people who got 85 (11.4%), 88 (11.4%).

The value of post test scores in control class

The post-test was conducted on 17th May 2023 in the X AKL 2. In this research the students wrote a procedure text considered of their major which included the goal, ingredients, and steps. And the writer was conducted time 90 minutes. This analyses students' knowledge of procedure text after giving explanation. It was calculated the mean, median, standard error of average, mode, and standard deviation by used application SPSS 20 such as follows:

Table 7. Statistic of Post-test in control class

Valid	33
N	
Missing	0
Mean	83.00
Std. Error of Mean	.650
Median	83.00
Mode	85
Std. Deviation	3.733
Variance	13.938
Minimum	77
Maximum	90
Sum	2739

The data explained that mean was 83, standard error of mean was 0.650, the median was 83, the mode was 85, the standard deviation was 3.733, the minimum of score was 77, the variance was 13.938, the maximum score was 90 and the total of score was 2739.

It was calculated on the data calculation of result after the test in control class by program SPSS 20 Program. The result statistics showed the table as follows:

Table 8. Post-Test of control class in SPSS 20

		Frequency	Percent	Valid Percent	Cumulative Percent
	77	2	6.1	6.1	6.1
	78	3	9.1	9.1	15.2
	79	1	3.0	3.0	18.2
	80	5	15.2	15.2	33.3
	82	3	9.1	9.1	42.4
Valid	83	6	18.2	18.2	60.6
	85	7	21.2	21.2	81.8
	88	2	6.1	6.1	87.9
	89	3	9.1	9.1	97.0
	90	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

The table explained that post-test control class score using program SPSS 20. The table explained that that was one person who got value 79 (3%), 90 (3%)

There were two people who got value 77 (6.1%), 88 (6.1%).

There were three people who got value 78 (9.1%),82 (9.1%), 89 (9.1%). There were five people who got value 80 (15.2%).

There were six people who got value 83 (18.2%). There were seven people who got value 85 (21.2%).

Table 9. The value Description of pre-test and post-test in experimental and control classes.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Pre-Test Exp	35	55	75	63.60	5.089
Post Test Exp	35	77	95	86.26	5.343
Pre-Test Cont	33	52	70	64.18	4.475
Post Test Cont	33	77	90	83.00	3.733
Valid N (list wise)	33				

The table explained that X AKL 1 is as experimental class, it showed the value. The minimum value of pre-test was 55, the maximum value of pre-test was 75, the mean of pre-test was 63.60 and the standard deviation of pre-test was 5.089. While doing the test in experimental class, it showed the data. The minimum value of test was 77, the maximum value of test was 95, the average was 86.26 and the standard deviation was 5.343. The data has been shown that using mind mapping technique and Instagram as the media for uploading mind mapping in writing procedure text.

The value was comparing pretest and post-test between experimental and control classes

According that table, it explained that the comparison of pre-test and post- test result in experimental and control class gave a different result. In mean of pre-test and post-test of experimental class was 63.6 and 86.257, from the mean of pre-test and post-test of control class were 64.181 and 83. And then the maximum value of pre-test and post-test in experimental class were 75 and 95, and the maximum value of pre-test and post-test of control class were 70 and 90, and the minimum value of pre-test and post-test in experimental class were 55 and 77, for the minimum value of the pre-test and post-test in control class were 52 and 77. This means that experimental and control class gave a different level in writing procedure text after treatment.

Normality Test

Testing the normality of students' procedure text for the pre- test and post-test in experimental and control classes.

Tests of Normality

Table 10 Test of Normality

	Class	Kolmogorov-Smirnova			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
	Pre-Test Exp	.093	35	.200*	.974	35	.553
	Post Test Exp	.108	35	.200*	.956	35	.171
Result							
	Pre-Test Cont	.148	33	.063	.903	33	.006
	Post Test Cont	.123	33	.200*	.947	33	.112

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

The data of table above explained that used Kolmogorov-Smirnov= 5% or (a=0.05), it showed significance of pre-test in experimental class was 0.200. So, the significance of pre-test experimental class was $0.200 \geq a=0.05$. The significance of pre-test in control class was 0.063. The result was $0.063 \geq a=0.05$. It can resume that pre-test experimental and control class was normal distribution.

The data Post-test showed the table above used Kolmogorov-Smirnov= 5% or (a=0.05), the data significance post-test of experimental class was 0.200, it means that $0.200 \geq a=0.05$. the significance of post-test in control class was 0.200, it means that $0.200 \geq a=0.05$. it can resume the data that after giving test in post-test in experimental and control classes were normal distribution.

Homogeneity Test

In this study, the writer used levene's test statistic to check the homogeneity of variance.

Test of Homogeneity of Variances

Table 11. Homogeneity Test of post-test experimental and control classes result.

Levene Statistic	df1	df2	Sig.
6.022	1	66	.017

The data showed that a significance level of 0.017. It signed that the levene statistic of significance was smaller than 0.05 (0.017 < 0.05) it is not homogeny. So, the writer transformed the data.

Test of Homogeneity of Variances

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Table 12. Transfom Homogeneity Test of post-test experimental and control classes.

Levene Statistic	df1	df2	Sig.
1.546	13	50	.134

The data showed that a significance level of 0.134. It signed that the levene statistic of significance was bigger than 0.05 (0.0134 > 0.05) it is homogeny.

Hypothesis Test

Testing Hypothesis used Manual calculation

The value t-test used manual calculation for testing hypothesis of this study. It could be as follows:

Table 13. Manual Calculation of Mean, The Std. Deviation, The Std. Error

Class	Mean	The Standard Deviation	The Standard Error
Ex Post	86.25714	5.343180685	0.903162378
Con Post	83	3.733296131	0.649883439

In the table above was showed that the standard deviation from experimental class was 5.343, the mean was 86.25 and the standard error was 0.903. While in control class was showed that the mean was 83, the standard deviation was 3.733 and the standard error was 0.650.

Continue to the next step that calculated the standard error of difference mean between Experimental class and control class as follows: Standard error of differences mean between variable 1 and 2.

$\text{SEM1} - \text{SEM2} = \sqrt{SEM1^2 + SEM2^2}$

$\text{SEM1} - \text{SEM2} = \sqrt{0.903^2 + 0.650^2}$

$\text{SEM1} - \text{SEM2} = \sqrt{0.815 + 0.422}$

$\text{SEM1} - \text{SEM2} = \sqrt{1.2375}$

$= 1.112$

That calculation showed that the standard error of differences of the mean between experimental class and control class (X1 and X2) were 1.112. So, it was calculated the t_o formula as follows:

$M_1 - M_2$

$SEm_1 - m_2$

$o\ 86.26 - 83$

1.112

$t = \dfrac{}{}$

$o\ 3.26$

1.112

$t = \dfrac{}{}$

$t\ o = 2.93$

With the note:

If $t_{test} \geq t_{table}$, H_a was accepted, and H_o was rejected. If $t_{test} < t_{table}$, H_a was rejected, and H_o was accepted. This study was interpreted as the result of t_{test}. (df) Degree of freedom with the formula

$DF = (N1 + N2) - 2$

$= (35 + 33) - 2$

$= 66$

This study used the level of significance in 5%. It means that the level of the refusal null hypothesis typed stated on non-directional (two tailed test). So, it is the answer of hypothesis that could not predicted the prediction of alternative hypothesis. The calculation above explained that the result of t- test calculation as follows:

Table 14. Manual Calculation of t-table.

Variable	T-observed	T-table		df
		5%	1%	
X1-X2	2.93	1.67	2.38	66

Noted　　:

X1: experimental class X2: control class

T-observed: the calculated result T-table: The distribution of t result Df : Degree of Freedom

According to result of hypothesis using calculation, it had been found the value of t-observed, it was bigger than value of t-table at level of significance 5% or 1%, so it showed that 1.67 <2.93>2.38. it is Ha was accepted and Ho was rejected. It could be explained according to the result calculation that Ha is showing that mind mapping was effective for teaching writing procedure text of tenth AKL 1 of SMKN 1 Lamongan. And Ho showed that mind mapping was not effective for teaching writing procedure text of X AKL 2 of SMKN 1 Lamongan. The mind mapping was effective for teaching writing procedure text of SMKN 1 Lamongan gave significance effect at 5% and 1% significance level.

Hypotesis Test used program SPSS 20.

The value of t-test SPSS 20 to calculate t-test. It coud be seen as follows:

Group Statistics

Table 15. The Mean, Std. Deviation, Std. Error of Experimental and Control Classes

	Class	N	Mean	Std. Deviation	Std. Error Mean
Result	Post Test Exp	35	86.26	5.343	.903
	Post Test Cont	33	83.00	3.733	.650

The group statistic was explained that mean of experimental and control class were 86.26 and 83, the std. deviation was 5.343 and 3.733, and std. error mean were 0.903 and 0.650. Calcaluting T-test using SPSS 20

Table 16. Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Result	Equal variances assumed	6.022	.017	2.897	66	.005	3.257	1.124	1.013	5.502
	Equal variances not assumed			2.927	60.960	.005	3.257	1.113	1.032	5.482

The data explained that t-test for equality of mean in significance (2-tailed) was 0.005. According to the formula that the score:

There is difference significant = Sig. (2-tailed) < 0.05

There is no difference significant = Sig. (2-tailed) >0.05

The data has showed that the score sig.2-tailed was 0.005, so 0.005 < 0.05 it means that there is difference significant.

Table 17. The result of t-test using SPSS

Variable	T-observed	T-table		df
		5%	1%	
X1-X2	2.93	1.67	2.38	66

the table used SPSS 20 showed that the scores of t-observed was bigger that t-table at level significance 5% or 1% that was 1.67<2.93>2.38 = ha was accepted, and Ho was rejected. And it explained that Ha = mind mapping was effective for teaching procedure text of tenth class of SMKN 1 Lamongan. And Ho= mind mapping was not effective for teaching procedure text of tenth class of SMKN 1 Lamongan. Mind Mapping was effective for teaching writing procedure text of SMKN 1 Lamongan with significance 5% and 1% significance level.

PEMBAHASAN

In this study, the writer presents the discussion of the research findings about the effectiveness of mind mapping in Instagram in writing procedure text. It was conducted the study by using two samples of population from Tenth AKL 1 is 35 students and Tenth AKL 2 has 33 students.

The data of the study were obtained from the writing test score in procedure text. There are two kinds of the test for each group there are pre-test and post-test. The cumulative students score in both groups were identified by three indicators, namely content, organization, and vocabulary.

Teaching writing in procedure text with mind mapping in Instagram is effective. It makes students easier to write the ideas. Instagram is used to share the photos about their procedure text according their major. So, students can upload the steps which is delivered with the captions. By using the picture or photo which they upload, the students were interested, and it can make their imaginations more grown in writing procedure text.

To find out how mind mapping in Instagram can improve the students' writing skills in procedure text, the writer got some pieces of information from students' activities in learning process.

There were four times for meeting of this research in experimental class and there were three times for meeting of this research in control class.

At the first meeting before giving treatment the students did the pre-test. For this experimental class, it gave the purpose to know students' skills before doing treatment. This step of this test was the writer start to do mind mapping to take the students attention and it made the students interest to do next instruction of the writer. After that, the writer asked the students to write procedure text by their own major topic than have given by the writer then they collected their mind mapping. It aimed to know the students' skills in procedure text before got treatment. In this case, the writer checked the students' mind map by insert some picture or word in mind map. The writer gave some correction or suggestion based on the aspect of mind map. In the second meeting, the writer gave the treatment in writing procedure text using mind map in Instagram. The writer asked to the students that mind map had to upload in Instagram with the captions based on their mind map. There were three times for control class. In the first meeting the students were given pre-test by the writer. And after that the writer checked the result of pre-test and gave correction on the students' paper by insert missing word, phrase, sentence, language feature. Then in second meeting the writer gave the explanation based on the pre-test than had given. The writer gave correction and suggestion to the students after doing conventional method, the writer gave the post-test to the students.

To know the result about this study, the media is effective or not, the writer used pre-test, treatment and post-test in experimental class and the writer used pre-test and post-test in control class then computed both tests to SPSS 20 program. This result between experimental and control class shows that use mind mapping in Instagram is effective in writing procedure text by the students' score. The analysis data by using SPSS 20.0 that the mean of post-test experimental class was higher than the mean score of pre-tests (86.25 > 63.6). It resumed that the score of students increased after treatment. According to hypothesis calculation that show the result, the value was found that the significance of the probability (sig.2– tailed) was 0.005. the result was 0.005 < 0.05, Ha was accepted, and Ho was rejected. According to those results of hypothesis testing using the calculation of t-test, the data saw that mind mapping in Instagram as the technique for writing procedure text which better achievement than who did not use mind mapping in Instagram in writing procedure text.

By teaching how to write procedure text using mind mapping as technique to apply. From the results were obtained by the students, the use of mind mapping has good effect on students writing procedure text.

There were certain elements to teach how to write procedure text on Instagram by using mind mapping:
1. The students were not interested to write use mind mapping so, the writer used Instagram as the media writing.
2. The students felt difficult to find vocabulary, ideas, grammar and some motivated. The writer chose online learning when doing treatment.
3. Some students got difficult when they would upload and make caption, because their phone cannot be uploaded to Instagram, the writer gave the suggestion that sent to their friends' phone or sent to direct message in Instagram.
4. The students were confused when they would write about the organize of procedure text.

The teacher never tries to use media for learning in the classPembelajaran Crimping Trainer berpengaruh terhadap hasil belajar siswa SMK Muhammadiyah 1 Taman.

SIMPULAN

Berdasarkan hasil penelitian dan pengembangan produk tentang media pembelajaran *trainer crimping* yang dilakukan, maka dapat ditarik kesimpulan sebagai berikut: Media *trainer crimping* yang dikembangkan berupa produk baru sebagai media pembelajaran pada mata pelajaran komputer dan jaringan dasar. Proses pengembangan media *trainer crimping* pada mata pelajaran komputer dan jaringan dasar menggunakan metode pengembangan yang terdiri dari 5 tahapan, yaitu: (1) Analisis, dengan menganalisis kebutuhan yang diperlukan di SMK Muhammadiyah 1 Taman. (2) Desain, (3) Pengembangan, dengan menggunakan berbagai macam alat dan bahan yang biasa digunakan khusus untuk meng*crimping* dan ditambah dengan bahan – bahan yang dibutuhkan untuk membuat media trainer *crimping*. (4) Implementasi, mengetahui apakah media *trainer crimping* ini lebih efektif dan membuat siswa lebih aktif dan lebih cepat memahami materi dalam kegiatan belajar mengajar dari yang sebelumnya atau tidak. (5) Evaluasi, dengan mengevaluasi penerapan dari media yang sudah dilakukan secara langsung di dalam kelas. Pengembangan media pembelajaran *trainer crimping* ini telah teruji kelayakannya karena sudah mendapatkan validasi dari dua ahli yakni ahli media dan ahli materi, adapun presentase kelayakan media yang dinilai oleh ahli media mendapatkan presentase sebesar 90% dengan kategori "Sangat Layak" untuk digunakan dan penilaian dari ahli materi mendapatkan presentase sebesar 93% dengan kategori "Sangat Layak" serta respon peserta didik dalam angket peserta didik mendapat nilai rata- rata sebesar 88,2 dengan kategori "Sangat Layak" untuk digunakan dalam proses pembelajaran yang sesungguhnya di dalam kelas.

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