

Using Data-Driven Approach to Teach Descriptive Text: A Study in High School

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ABSTRACT

This paper aims to describe how data-driven learning can be applied in English classes when teaching descriptive text to senior high school students. This study was a self-observation involving 24 high school social studies students. The data were obtained from observation of student activities during learning, and the tasks carried out by students were in accordance with the basic competencies of the descriptive text material. The data were analyzed by conducting sorting the data and analyzing the sorted data by codifying and reporting the data. The results of this study showed that the application of data-driven learning with communicative learning methods can make students more confident in their abilities during the learning process. The use of data-driven learning is expected to increase students' motivation and learning abilities, especially in the field of writing.

Keywords: *corpus; data-driven learning; descriptive text; EFL learners; English teaching; online learning*

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INTRODUCTION

Panjaitan and Elga (2020) describe descriptive as one type of text that serves to describe a place, object, animal, or person in detail to provide information to the reader. This paper aims to describe how data-driven learning can be applied in English classes when teaching descriptive text to senior high school students. According to Guan (2013) currently there are still many problems that exist in teaching in teaching writing especially descriptive text, the challenge to teach reading writing is the form of teaching is still relatively simple and traditional, sentences are usually taken from sentences compiled by the teacher before; sentences that do not show sufficient clarity can cause students' attention to decline and fail to generate student initiative and current English teaching is still based on a textbook and focuses on brief explanations and giving simple exercises to the students.

An English teacher should be able to build a clear development of knowledge about an existing text. The teacher can explain specifically and in depth about the existing text then can help students to explain some of the questions that exist during the learning process (O'Brien, Nixon, & Sand 2010).

With the development of text knowledge, questions arise from students so the role of the teacher here is to help students find answers to these questions. Flowerdew (2015) describes data-driven learning (hereinafter: DDL) as a tool that has the potential to help the learning and discussion process as the basis for initial

writing knowledge, especially in increasing vocabulary. This method is essential in learning, especially to allow learners to extrapolate the vocabulary of descriptive texts based on their own views. Currently, the use of DDL for the teaching and learning process has provided new ideas for teachers to make assignments and activities with students during class more interesting, where the willingness and motivation of students are highly prioritized (Barabadi & Khajavi 2017). Proper use of DDL can also connect with a learner-focused approach to writing languages. In essence, students can learn to find and write grammatical patterns, the meaning of words contained in descriptive sentences, or other linguistic aspects through searching for authentic data given in the form of a corpus with the final result in the form of short writing (Corino & Onesti 2019).

DDL can be described as an approach to foreign language learning. DDL uses language as data and uses students as researchers who carry out tasks to process language as data (Flowerdew, 2015). According to Flowerdew (2015) there are four stages of applying DDL, such as: 1) Hypothesis formation through inductive corpus-based exercises, 2) explicit explanations from the teacher to confirm or correct these hypotheses, 3) hypothesis testing through follow-up exercises and 4) learner production. The first step is hypothesis formation. It can be done through inductive corpus-based exercises, in the classroom process students will be given corpus exercises by

the teacher to stimulate students to learn under the Data-Driven Learning the material that will be given. There are approach. Marinov (2013) summarized some activities or tasks that can be used the activities in the table below:

Table 1. Corpora Use in The Language Classroom

Previous study	Study Findings/Proposed usage
Tribble and Jones (1990)	Study Homonyms And Synonyms (Also Barlow, 1992) Lexical Inference (Also Gabrielatos, 2005) Study The word Grammar as well as the Grammar Rules
Barlow (1992)	Analyze usage of lexical items Analyze the language used in Particular books and textbooks Compare Language usage Study Word Order
Willis (1998)	Student potentially different meanings of some frequent words Compare frequency of some language items in different types of texts

Marinov (2013) practiced DDL by teaching synonyms to her students. She considered a practical finding by Patington (1998), that absolute synonyms are very rare. Thus, she taught her students to use particular synonyms offered by dictionaries or thesaurus. Further, the students were asked to analyse the difference in use and meaning between *crowded* and *packed*. With that students are expected to be able to modify sentences with various words with the same written meaning.

The second step is explicit explanations from the teacher to confirm or correct these hypotheses, in the classroom the teacher will explain to confirm the corpus and student results. The third step is hypothesis testing through follow-up exercises, in the classroom students will be given more in-

depth exercise on the material being taught, the exercises have been designed by the teacher to help students during the learning process. The last step is learner production, students will be given assignments based on the results of the material that has been taught during the process in class.

In corpus based DDL the corpora can be used in the classroom in two ways, namely by soft or hard. In the first way, which is soft, the teacher has access to the corpora by designing and creating assignments and then applying them to the classroom. The second way is that hard, students need to be equipped with computer aids, corpora or assignments that have been designed by the teacher and software as well as skills on how to use them (Marinov 2013). Historically, the application of DDL to different levels of

language proficiency and learning environments has been studied.

DDL is entirely dependent on an inductive approach with a process of paying attention which can be in the form of students being directly involved with teacher-directed assistance. To complete the concept of teacher-directed attention activities, Flowerdew (2015) added three specific practices that support teacher-directed attention (1) illustration (viewing data): students will be given data that they will use as a basis for observing material. (2) Interaction (discussion and sharing of observations and opinions): teachers and students will interact with each other to build good communication, and (3) induction (making their own rules for certain features: the teacher makes certain rules for students in the learning process.

METHOD

This best practice is adapted from self-observation report developed by Widodo (2009). This was a qualitative research that used direct observation in teaching experience as the main data source. Johnson and White (1971) identified that Self-Observation can aim to increase sensitivity in behavior or values held in oneself or the person being observed. Self-observation is also a broad behavioral change that can show a variety of outcomes and responses.

Settings and Participants

This research was conducted in one of the international standard senior high school in Sleman, Yogyakarta, Indonesia for 1 month in online teaching

using zoom meeting. 24 students in grade 10 social programs were involved in this online study with several activities that were given directly to students in class through zoom meeting provided by the school. The role of pre-service teachers controlled the entire learning process and observed student behavior during learning until the end of learning to see student interest. The formation of a communicative classroom atmosphere is also emphasized to help students be more confident during the learning process.

Data Collection

Data was collected through classroom observations, assignment, exercises and teaching and learning activities in the classroom which were carried out asynchronous and synchronous by grouping students based on their ability and interest in learning English with the given learning media. The students attended all existing classes and followed the class discussions well, the pre-service teacher also used some online media during learning processed in 2 days for 1 hour each day. These focused on student abilities, student activity and student understanding. Assignment and several activities were given directly to students in class through zoom meetings. The forms of activities and assignments were watched videos, power point presentations and then playing Kahoot, for the exercise the students were asked to make short paragraphs about describing a place they know. The data obtained in the form of student notes and assignments collected

with student records can help to determine the level and ability of each student, then for student understanding the data obtained from the results of their assignments are processed into constructive feedback such as "You have not put to be in the first sentence". The data were through.

Research Procedures and Data Analysis

In the analysis phase, the researcher conducted an analysis of the results of the learning process. The most essential moment was a question and answer session about videos and short texts with the pre-service teacher during the lesson, Self-observation procedures can be used and serve to enhance the self-observed behavior pathway (Johnson & White, 1971). The data were analyzed by conducting three phases. First, the data were sorted according to their teaching purposes. I sorted the data into three categories: teaching materials, classroom

recording, and students' tasks. Second, I analyzed the sorted data by codifying them in accordance to the data driven learning, Third, I reported my teaching practices in accordance to data driven learning by describing each teaching stages.

RESULTS AND DISCUSSION

When I composed the worksheet, I paid more attention and focus on the students' English level by knowing their behaviour, and interest in English subjects, making the form of questions that are easily understood by students and preparing brief explanations for questions asked by students, In teaching reading and writing, students were involved in discussions and motivated themselves to find out more information that was obtained indirectly through questions and answers about the videos and reading texts given.

Table 2. Steps in the Data-Driven Learning process.

Steps	Activity
Hypothesis formation through inductive corpus-based exercises.	Students were given corpus exercises by the teacher to stimulate students to learn the material that will be given (Fill in the blank). They were asked to listen to a video & fill in the blanks upon the transcript of the video. The corpus was taken from an English book entitled "The Reading Teacher's Books of Lists' pages 203.
Explicit explanations from the teacher to confirm or correct these hypotheses,	The teacher explained the correct answer to assess the students' understanding.
Hypothesis testing through follow-up exercises	Students were given more in-depth exercise on the material being taught, the exercises have been designed by the teacher to help students during the learning process.
Learner Production	Students were assigned assignments based on the results of the material that has been taught during the process in class.

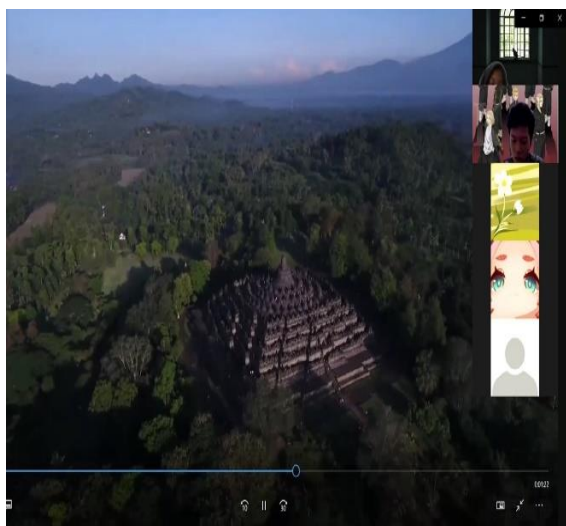
(Step 1) Hypothesis formation through inductive corpus-based exercises

I gave students activities. In this activity I gave a video about descriptive text, after that I asked them to listen to the video and take notes on important

things like a the name of place, the year, then I asked students to do the activity to fill in the blank. The purpose of this exercise was to get used to students' listening and writing skills.

Table 3. Excerpt of dialogue transcript among teachers and students in the Zoom meeting

Teacher	After watching the video we will do an exercise, the exercise is fill in the blank about the video, ok?
Students 1	Sir, does this mean the contents of the empty sentence from the video we watched earlier, sir?
Teacher	Yes, we will fill the blank words together, the information we get on the video before.
Teacher	Ok, let's watch the video and, any questions before?
Students 1	Alright sir



Picture 1. The Exercise of Teaching Materials (Watching Video)

Borobudur is located on the (1) _____ island of Java burrowed within an isolated valley surrounded by swaying (2) _____ and majestic mountains. This (3) _____ monument is about 25 miles northwest of the bustling city of Yogyakarta. Borobudur is the (4) _____ temple in Indonesia, built between the eighth and ninth centuries. It's also the biggest (5) _____ temple in the world. (6) _____ years Borobudur has survived volcanic eruptions, terrorist bombs and earthquakes. It's enigmatic and beautiful design make a visit and unforgettable experience. My experience with Borobudur started with a predawn drive from the city of (7) _____. There is however, accommodations much closer at [Manohora](#), the closest hotel near this site, where they provide guided tours with (8) _____ in hand. We began the ascending walk with plenty of time to prepare our cameras for the sunrise. After the light revealed Borobudur, I was enamored by its magnitude and majestic beauty. With all of my travels. I had never seen anything like it. There was so much to explore that a single sunrise visit was simply not enough time. I would highly recommend spending at least an entire day, if not more to fully appreciate all of its intricacies and grander. Well that's it from the Borobudur temple in Central Java in wonderful Indonesia. Until next time, we'll see on the road

Picture 2. Fill In the Blank

I tried to look for a possible corpus of descriptive texts that could help my students to use the words in descriptive

sentences. I found a book, written by *John Wiley & Sons* entitled *The Reading Teacher's Books of Lists (2000)* that

provides lists of vocabularies to describe something or someone.

Time				
ancient	daylight	late	outdated	sunrise
annual	decade	lengthy	periodic	sunset
brief	dusk	long	punctual	swift
brisk	early	modern	quick	tardy
centuries	eons	moments	rapid	twilight
continual	evening	noon	short	whirlwind
crawling	fast	noonday	slowly	yearly
dawn	flash	old	speedy	years
daybreak	intermittent	old-fashioned	sporadic	young

Picture 3. Descriptive Words of Time

From the given vocabulary list, I transferred them into the fill in the blanks task.

The sample of fill in the blanks that use the corpora above are:

1. Borobudur is the _____ **(Old/Young)** temple in Indonesia.
2. Mulawarman Museum had _____ **(Long/Short)** entrance way.
3. In Kutai Kartanegara the sun will _____ **(Sunrise/Sunset)** In the Morning is very beautiful
4. Kutai Kingdom is the _____ **(Early/Late)** Hindu Buddhist kingdom in Indonesia
5. The _____ **(fast/Slowly)** way to the Kutai museum is using Motorcycle

As stated by Barabadi & Khajavi (2017) the use of DDL for the teaching and learning process has provided new ideas for teachers to make assignments and activities with students during the class more interesting, where the

willingness and motivation of students are prioritized, seen from the use of short videos as teaching materials that help students in doing exercises with the teacher make students more interested by watching the short video provided, students can also remember or write important points conveyed in the video and can make students process data into information. As mentioned by (Flowerdew 2015), DDL uses language as data and uses students as researchers who carry out tasks to process language as data. When it is observed in class to fill in the blanks in a sentence based on the video they have heard and watched before, they can confidently fill in the correct sentence.

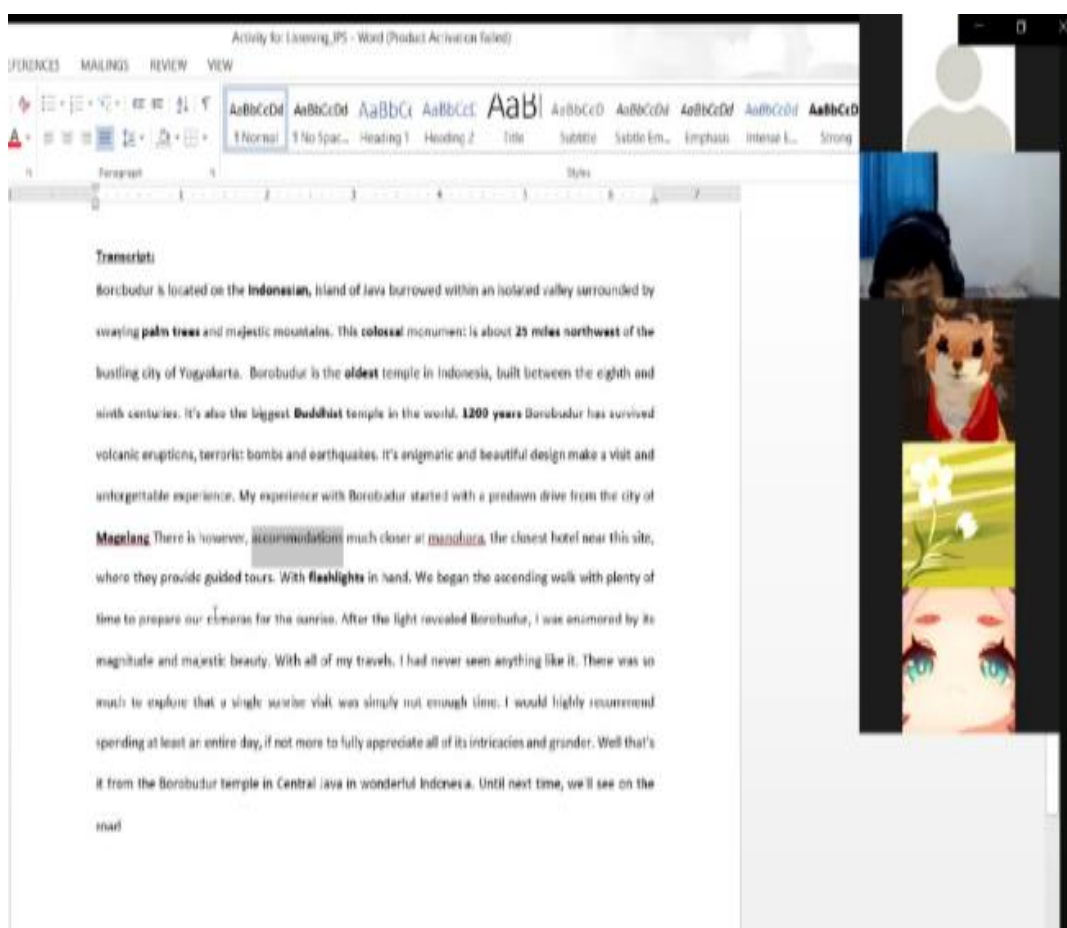
When the students completed the exercise, the atmosphere during the learning process through zoom meetings looked positive. Students were asked and discussed to ensure the correct answer with their friends.

(Step 2) Explicit explanations from the teacher to confirm or correct these hypotheses listening to video & fill in the blanks

I had two activities in this step. First, after all students paid attention and filled in the answers, then I evaluated their work together. I had made the correct full text of the transcript. I asked some students to read and discuss with their friends and then checked their answers together whether they matched the transcript I made.

Table 4. Excerpt of Dialogue Transcript among Teachers and Students in The Zoom Meeting

Teacher	So guys for number one, anyone want to read and try to answer?
Students 1	I am sir, my answer is Indonesia
Students 2	Indonesia Sir Aldo
Teacher	Thank you, Anyone else? So for number one the answer is Indonesia, Borobudur bla bla bla bla Indonesia
Students 1	Is it okay to use the word "in Indonesia" sir?
Teacher	Sure, the important thing is that there are words used to describe, for example "located"



Picture 4. Fill the answer together with the students

As seen from the students' respond to questions given by the teacher when discussing the correct answers (corpus to fill in the blanks) the students were given their own answers, the teacher was written down the actual answers followed by explanations to the students. As mentioned by (O'Brien, Nixon, and Sand 2010), an English teacher must be able to build a clear development of

knowledge about the existing text. The teacher can explain specifically and in depth about the existing text then can help students to explain some of the questions that exist during the learning process. Short explanations are useful for students to keep students focused on the topic being discussed, short explanations are also useful for further maximizing students' understanding of the exercises or texts given.

The Second, I explained the Simple Present Tense formula to my students

(Word -order & grammar of descriptive text. A good sentence consists of S+ V+O or S+V+C tense: Present Tense) because this tense is related to the descriptive text material that I would convey. I also gave 1 example each in positive, negative and interrogative sentences to help them understand easily. I gave exercise by randomly appointing several students to make one positive, negative and interrogative sentence. The image below shows a video snippet of me teaching and how I asked them to make a sentence

Table 4. Excerpt of dialogue transcript among teachers and students in the Zoom meeting

Teacher	So everyone, does anyone know what form of descriptive text to use? Past tense or present tense?
Student 1	Present sir
Student 2	Present and past tense sir
Teacher	Right, so descriptive text using present and past tense, anyone know what is the formula of simple present tense?
Student 2	Subject, object sir
Student 3	Subject object verb sir
Teacher	Thank you for your response, Anyone? Ok so Simple present tense using Subject + Verb 1 + Object and there are three types, positive, negative and interrogative.
Teacher	Does anyone want to help me give 1 example of a positive simple present tense?



Picture 5. Word order & grammar of the descriptive text

In Word-order & grammar descriptive text that focuses on sentence form, the students were asked to be able to understand and made examples from the data that was given in the form of sentence pieces, the teacher must be able to explain in detail about the focus of the material being discussed. This is in line with the findings of Guan (2013) that sentences that do not show sufficient clarity can cause students' attention to decrease and fail to arouse student initiative. Therefore, the teacher can give more attention to students by providing

clear data, good communication to facilitate students when presenting and explaining the material provided. As mentioned by Flowerdew (2015) adding three specific practices that support the teacher's directed attention (1) illustration (looking at the data): (2) Interaction (discussing and sharing observations and opinions) (3) induction (making their own rules for certain characteristics).

It was seen when the students were made some sample sentences from the data that was given previously, students were discussed with the teacher and friends, a clear understanding of the basic concepts of sentences that really helped students in processing the data that was given into new information.

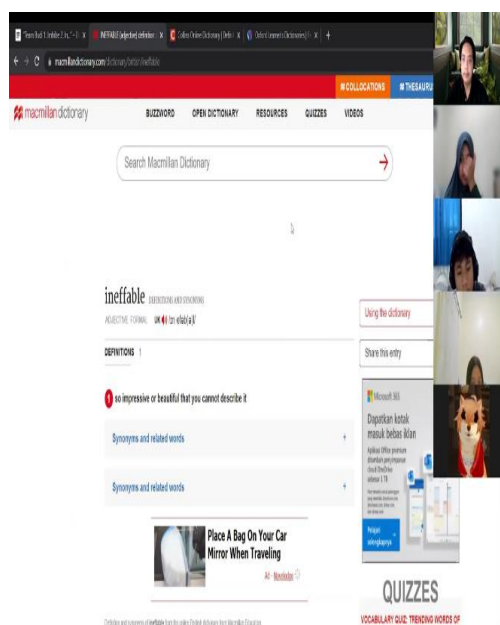
(Step 3) Hypothesis testing through follow-up exercises

In this step I had two exercises. In the first exercise I asked the students to check the meaning of some words that I had prepared using an online dictionary and discuss together how to pronounce and use the vocabulary in written form.

Table 6. Excerpt of dialogue transcript among teachers and students in the Zoom meeting

Teacher	So guys, I have some exercise for you, do you often use online dictionaries? but not google translate.
Student 1	No sir, i usually use Google Translate
Teacher	Ok, no problem, so today you will use an online dictionary to help you find the meaning of some words and how to pronounce it.
Teacher	I have prepared some words, and then I will ask you to look up the meaning of the word in Indonesian using an online dictionary and I will ask you to read the word in English. Any questions?
Students 3	Read the meaning in Indonesia or read the English word sir?

Teacher	Read the word in English, and we will check the meaning and the pronunciation together using an online dictionary. Any questions?
Students	No sir
Teacher	For example, the view from the top of the Borobudur temple is very ineffable. Does anyone know the meaning of ineffable?



Picture 6. Check the meaning of some words using an online dictionary

As stated by Flowerdew (2015) Data-Driven Learning as a tool that has the potential to help the learning process and discussion as a basis for initial knowledge of writing, especially in

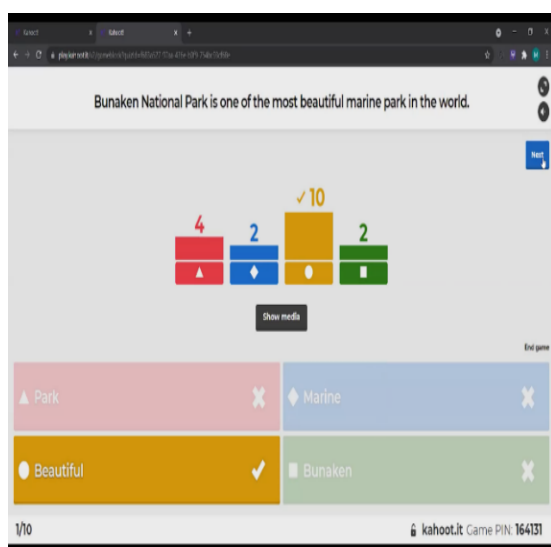
increasing vocabulary. This method is important in learning, especially to accommodate students to extrapolate descriptive text vocabulary based on their own views. Good data processing is also based on sufficient vocabulary knowledge with good vocabulary understanding, students will find it easier to learn the basic material provided and a broad understanding of vocabulary can help students determine words or sentences that are suitable to be used or written in a text, especially text. descriptive.

In the second exercise, I gave the students mini-games using “Kahoot”. I had to make 10 sentences and then the students must choose a word in the sentence that could be used to describe something. The picture below shows how I presented the exercises.

Table 7. Excerpt of Dialogue Transcript among Teachers and Students in the Zoom Meeting

Teacher	Ok, for the last exercise we will play a mini game using Kahoot, open Kahoot on your browser and then enter the code
Students 1	Yes sir
Teacher	Does anyone have a problem joining?
Students 3	I cannot join sir my connection is bad
Teacher	No problem, 3 minutes again, if you cannot join you can see on your zoom, i will share the screen, everyone has joined?

Students 2	Yes Sir.
Teacher	Ok, so you must choose a word in the sentence that can be used to describes something, let's play



Picture 7. Exercise using Kahoot

As mentioned by Barabadi & Khajavi (2017) the use of DDL for the teaching and learning process has provided new ideas for teachers to make assignments and activities with students more interesting during class, the use of

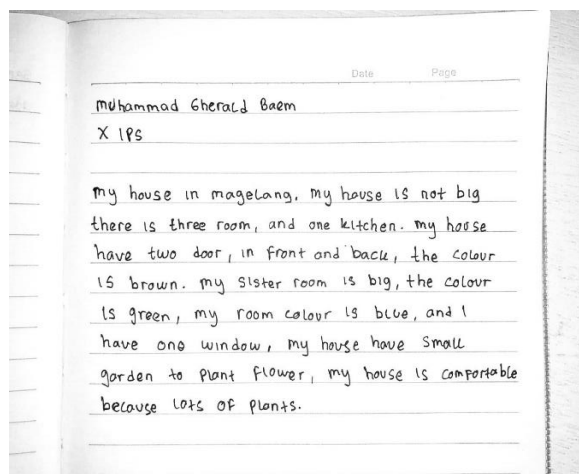
online learning media and assignments such as videos and kahoots are also included. In one of the developments of ideas for teachers in providing exercises to their students, it could be concluded that almost all students were involved in the discussion and could motivate themselves to know more about the video and text, which also meant that they learned more effectively indirectly through questions and answers about the video and the reading text.

(Step 4) Learner Production

In the last step for learner production I asked the students to write in a book a simple descriptive paragraph about a place that consisted of 5 simple sentences and then submitted them to Google classroom.

Table 8. Excerpt of dialogue transcript among teachers and students in the Zoom meeting

Teacher	After we learn descriptive text does anyone have questions? If there's no question, I will give you one assignment, you will write simple descriptive text about a place you like, and then submit it on the google classroom. only five sentences
Students 1	Today sir?
Students 2	Okay sir,
Teacher	Not today, the deadline is tomorrow at night, you can see on your GC
Students 3	Alright sir, thank you
Teacher	Don't forget to write your name and class, if you have any questions, you can contact me on Whatsapp.



Picture 8. Learner Production of descriptive text

In learner production, students were given the task of writing a short descriptive text about a place based on the results of the material that was taught during the classroom process which aims to assess students' abilities during previous learning, and also to find out the extent to which students understand the material that was given. This is in line with the findings of Corino & Onesti (2019), that the proper use of DDL can also be linked to a learner-focused approach to language writing. In essence, students can learn to find and write grammatical patterns, meanings of words contained in descriptive sentences, or other linguistic aspects through searching for authentic data given in the form of a corpus with the final result in the form of short writing.

It can be seen from the student activities in the form of making a short descriptive text, the teacher can see and assess the diverse abilities of each student, the teacher can also provide feedback from the student's production to build the enthusiasm and motivation of students in the future.

From the submitted task above, I gave constructive feedback through google form, such as:

1. You have not put to be in the first sentence.
2. You have not put capital letters after full stops.
3. You use too many commas in some sentences.
4. You have not use "S/es" in Plural word, Example: Doors, Rooms, Flowers
5. In the first sentence you have not use capital letter

CONCLUSION

By doing DDL to teach descriptive text to students, they became more confident during the learning process. This can be seen from the willingness of some students to submit opinions and provide examples of the material without coercion with a pretty good response, although there were still some students who are less active, they still tried to paid attention to what was being conveyed, judging from their English skills, they can be said to be very good.

However, with the advantages of each method, there are also limitations, the limitations in this method are found in students who are less active in asking and answering during the learning process. This method will be very effective if used among active students, and if used among students who are less active and with lower levels this method may be the same as teaching methods in general.

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This article was written by the author in accordance with his 1 month teaching internship program at a high school as a pre-service teacher.

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