

Climate Change-Based Report Texts For Senior High School : a Mix Method Study

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Received: 28 November 2021 Accepted: 30 December 2021 Published: 31 December 2021

Abstract: Climate Change-Based Report Texts For Senior High School : a Mix Method Study. Objectives: This research aimed to uncover the needs of high school students to develop English reading material based on climate change and examined by perspectives of students, English teacher, and stakeholders. **Methods:** This study used mix method. Participant of this study was the eleventh-grade students, English teachers, and other school stakeholders. Data were obtained using a questionnaire and semi-structured interviews. **Findings:** Result of needs analysis showed that: 1) students still had difficulty understanding the text. 2) type of text needed was report text, 3) students did not still know about climate change, 4) main reason for including climate change in reading was to encourage motivation English. **Conclusion:** Due to the need, it was necessary to develop supplementary report text reading materials incorporating climate change to suit the students' English proficiency.

Keywords: English reading materials, Senior High School, climate change, need analysis.

Abstrak: Teks Laporan Berbasis Perubahan Iklim Untuk SMA : Studi Metode Campuran. Tujuan: Penelitian ini bertujuan untuk mengungkap kebutuhan siswa sekolah menengah atas untuk mengembangkan bahan bacaan bahasa Inggris berbasis perubahan iklim dan dikaji dari perspektif siswa, guru bahasa Inggris, dan pemangku kepentingan. **Metode:** Penelitian ini menggunakan metode campuran. Partisipan dari penelitian ini adalah siswa kelas sebelas, guru bahasa Inggris, dan pemangku kepentingan sekolah lainnya. Data diperoleh dengan menggunakan kuesioner dan wawancara semi terstruktur. **Temuan:** Hasil analisis kebutuhan menunjukkan bahwa: 1) siswa masih kesulitan memahami teks. 2) jenis teks yang dibutuhkan adalah teks laporan, 3) siswa masih belum mengetahui tentang perubahan iklim, 4) alasan utama memasukkan perubahan iklim dalam membaca adalah untuk mendorong motivasi bahasa Inggris. **Kesimpulan:** Karena kebutuhan, perlu untuk mengembangkan bahan bacaan teks laporan tambahan yang menggabungkan perubahan iklim agar sesuai dengan kemampuan bahasa Inggris siswa.

Kata kunci: bahan bacaan bahasa Inggris, SMA, perubahan iklim, analisis kebutuhan.

To cite this article:

Tenridinanti, T., B., Inderawati, R., & Mirizon, S. (2021). Climate Change-Based Report Texts For Senior High School: A Mix Method Study. *Jurnal Pendidikan Progresif*, 11(3), 610-625. doi: 10.23960/jpp.v11.i3.202112.

■ INTRODUCTION

In communicating with each other, we use language which consists of texts. Learning a language facilitates students' to study a text especially reading (Herawati et al., 2020). According to Nurhajati & Kencanawati (2020), the text refers to a model in which language is used and how the ideas are delivered. To evade students' boredom while reading texts, appropriate materials are required (Haryanti, et al., 2021). They are informative to convey the information to the readers.

Deputy Minister of Education and Culture of the Republic of Indonesia for Education (2014) elaborated about the concept and implementation of the 2013 curriculum, a lesson plan is very dominant and strict based on the logical order of the learning appropriate material, teachers at school give the materials to students based on the syllabus that has determined by 2013 curriculum. Based on the Ministry of Cultural Education, Research and Technology (2020), the report text has existed in the lesson plan of Senior High School. In the core competency of the lesson plan, teachers need to construct the report text to notice the content and language aspects, both spoken or written critically, collaboratively, and communicatively during the learning process. According to the 2013 curriculum, report text is one of the texts that need to be learned by Senior High School students. This shown report text is a crucial part of materials that students need to know.

Report text explains the detail of an object based on the observation. Report text usually contains facts, descriptions, and information on its part, behavior, and qualities. The topic of the report is usually introduced by an opening general statement or general classification and followed by a series of descriptive paragraphs about the topic (Azizah, 2019). A report text includes the material to learn at school. The materials are an integral part of teachers' daily work and are

intimately connected to the enactment of instruction (Jones & Kessler, 2020).

UNESCO (2021) tells about the international community recognizes the importance of education and training to address climate change in curriculum education. The UN Framework Convention on Climate Change called on governments to educate, empower, and engage all stakeholders and major groups on policies and actions relating to climate change. Moreover, UNESCO has made education a more central and visible part of the international response to climate change. Education is crucial to promote climate action. It helps people understand and address the impacts of the climate crisis, empowering them with the knowledge, skills, values, and attitudes needed to act as change agents. This issue makes education needed to promote climate change to the global nation. United Nations Framework Convention on Climate Change (2007) elaborated that climate change changes in rainfall patterns are likely to lead to severe water shortages and flooding. The melting of glaciers can cause flooding and soil erosion. Rising temperatures will cause shifts in crop growing seasons, affecting food security and changes in the distribution of disease vectors, putting more people at risk from diseases such as malaria and dengue fever. Temperature increases will potentially severely increase extinction rates for many habitats and species (up to 30 percent with a 2° C rise in temperature).

Civic engagement or participation in climate change is important. Forms of engagement range from tactics are involving citizens working directly to change their behaviors, along with those involving indirect efforts to bring about change through the political and economic systems (Fisher & Nasrin, 2020). Every human has the responsibility to participate in nurturing the world. According to Asimakopoulou et al. (2021), climate change education (CCE) fosters students'

skills and behavioral patterns regarding climate-related challenges and risks. Despite its importance, the integration of CCE in schools is challenging due to the interdisciplinary nature of climate science and the obstacles and demands of everyday school reality.

The phenomenon makes the students should understand by learning climate change in their reading material which is report text. The ASEAN (2020) said that the COVID-19 pandemic had exacted a devastating toll on lives and economies worldwide. It is easy to forget that another crisis, climate change, still looms before us. Experts remind us that global warming will have even more disastrous effects in the long term if urgent action is not taken now. Climate change is a threat we can no longer ignore. The time to act is now. Organization for Economic Co-operation and Development (OECD) (2020) stated that the world is warming more quickly than anyone expected. Many scientists project the planet will be at least 1.5 degrees Celsius warmer by around 2050, or even earlier, relative to pre-industrial levels. Climate action can change our lives for the better by the green recovery in the age of COVID-19. By this issue, the first thing to do is introduce the students to how vital learning a climate change is by learning it in report text to meet the students' needs.

Knowing this issue, the first thing to do is conduct a need analysis to meet the students' needs (Azizah, Inderawati & Vianty, 2020). Needs analysis (also known as needs assessment) has a vital role in the process of designing and carrying out any language course, whether it be English for Specific Purposes (ESP) or general English course, and its centrality has been acknowledged by several scholars and authors (Munby, 1978; Richterich & Chancerel, 1987; Hutchinson & Waters, 1987; Berwick, 1989; Brindley, 1989; Tarone & Yule, 1989; Robinson, 1991; Johns, 1991; West, 1994; Allison et al. (1994); Seedhouse, 1995; Jordan, 1997;

Dudley-Evans & St. John, 1998; Iwai et al. 1999; Hamp-Lyons, 2001; Finney, 2002; Songhori, 2008). According to Hariyadi & Yanti (2019), needs analysis (also called needs assessment) refers to activities involved in gathering information that will serve as the basis for developing a curriculum that will meet the learning needs of particular groups of students.

In this case, learning needs or needs analysis is to determine the information of the learning situation, taking into account the various types of learners and their levels of cultural awareness and English skills, and the materials available, current resources, and any other information that provide the learners in obtaining insight to the learners (Ulfah, et al., 2021). Need analysis has three models which recognize by some scholars; (1) Target Situation Analysis; (2) Present Situation Analysis; (3) Strategy Analysis. Target Situation Analysis (TSA) focused on students' needs at the end of the language course. Present Situation Analysis (PSA) showed the gap between the present and the target. PSA explores the students' language proficiency when the language course begins and their strengths and weaknesses. Strategy analysis concentrates on the students' options on learning investigation, error revision, group sizes, homework's amount, and so on (Diana, Mansur, 2018).

The purpose of conducting needs analysis is to identify learners' needs evidently and design an appropriate lesson plan accordingly (Fayzulloeva, Ametova, & Mustafayeva, 2020). The expertise or skills needed, the students' challenges or the teaching strategies to be applied are required in doing need analysis (Inderawati et. al, 2021). In terms of designing or developing syllabus or materials, some researches conducted about need analysis on report text such as Rahmati (2019), Harris, Ansyar & Radjab (2014), Dinamika & Hanafiah (2019), Ginting, Rahmawati & Purwanto (2019), Ampa & Quraisy (2018), Barghamadi (2020), Zaheer et al. (2020),

Bytyqi (2021), Erdogan & Mehmet (2021). Those studies showed the grammatical error and necessary function of the need analysis in organizing the commands, designing textbooks, or developing teaching materials. According to Azizah, Inderawati, & Vianty (2020), need analysis can identify the problem faced by the students, the knowledge or skills required, or the teaching method that should be used. Moreover, the result of the need analysis could be the priority thing to meet the needs of the students.

This study reveals students' needs in report text on climate change. Since it becomes a particular case in this century, it will be the first stage before development. This study had similarities and differences to the previous studies. The similarities were the students' need analysis investigations. The differences were students' grades, the schools, the English skills-focused, and the need analysis field. The specific difference was on climate change.

Unfortunately, UNESCO (2018) tells about climate change that focuses on sustainable development. In other sources, there were no recent researches entitled need analysis of report text on climate change. Moreover, in the eleventh grade, English textbook by the Minister of Education and Culture (2017), the material about climate change has existed, but it talked about analytic exposition text. This current study intends to reveal that the previous research has never investigated students' need to report text on climate change, so that this recent study will analyze it.

Therefore, the students' needs analysis includes Target Situation Analysis, Present Situation Analysis, and Strategy Analysis. This need analysis investigated the students' needs viewed by the 11th students of Senior High School of SMA Srijaya Negara Palembang, English teacher, and other school stakeholders. The objective of this study was to describe the

views of the 11th students of SMA Srijaya Negara Palembang, English teacher, and stakeholders related to analyzing the students' needs in English report text on climate change.

METHODS

Research Design

This study used mix method, which is quantitatively and qualitatively. The quantitative method was used to measure the data obtained from the questionnaire. Besides, the qualitative method was used to interpret and explain the information obtained from the interview.

Participants

This study was taken at SMA Srijaya Negara Palembang. Population of this study was the eleventh grade students which was 138 students of 4 classes, 3 English teachers, and the stakeholders. Purposive sampling was used to obtain the sample of this study so that the writer took only 1 class that was 33 students, 1 English teacher, and 1 assistant curriculum as the participants of this study.

Instruments

The questionnaires and semi-structured interviews, the data were obtained. The questionnaires were given to the students which consisted of twenty five questions and thirty seven questions to the English teacher. The questions of the questionnaire were adapted or modified based on the purpose of this study in relation to the students' necessities, perception in present situation (lacks and materials) and wants or targets, as suggested by Hutchinson and Waters (1987) in doing need analysis for students. The questions were classified into Target Situation Analysis, Present Situation Analysis, and Strategy Analysis. The interview was conducted with the English teacher and assistant curriculum primarily related to teaching English in Senior High School,

the existing English reading materials, and report text on climate change in developing English materials.

■ RESULT AND DISCUSSIONS

The students' needs viewed by the students

The data were obtained from the students' views related to the students' needs in Target Situation Analysis, Present Situation Analysis,

and Strategy Analysis. The highest percentage of students' view of each questions in the questionnaire.

Target Situation Analysis (TSA)

This part was focused on the necessities of the students, a general intention, and expectations in learning English. The data obtained can be seen in table 1.

Table 1. The students' view on TSA

No.	Question/Statement	Students' View	Percentage
1.	The importance of learning English	To help to communicate with other people	57.6%
2.	The students' expectation toward learning English	To communicate using English in oral communication in the future workplace	63.6%
3.	The language used for students' career	To do oral communication with colleagues or tourists	72.7%
4.	The English proficiency level for students' career	Intermediate	36.4%

In this table, to help communicate with other people was 57.6% in terms of learning English which is essential to students. Moreover, 63.6% obtained from students' expectations toward learning English was to communicate using English in oral communication in the future workplace. This term is also the purpose of the Ministry of Education and Culture (2014) that Senior high school could develop the potential of students to have communicative competence in interpersonal discourse, transactional, and functional. By this term, to do oral communication with colleagues or tourists was obtained 72.7% as the highest score in terms of the language used for students' career. The last, the English proficiency level for students' career was Intermediate level which obtained 36.4%. Therefore, to communicate orally with colleagues or tourists, students need to have the knowledge

of reading skills in English which is in line with (Herawati et al., 2020). It also stated by Mart (2012) that reading will help students decipher the new words they need for communicating to other people. Through reading, the students will gain vocabulary knowledge which will facilitate their oral performance and develop their use of structure in the target language. One of the reading skills that students should know is report text so that the students know how to report the text.

Deficiency Analysis

This part considered the students' current wants and needs and their target situations deficiencies or lacks. The data about the students' current wants and needs related to the topics or input for reading are shown in table 2.

From table 2, daily life is the desired topic by the students to learn reading, the percentage

was 60.6%. The students' desired input for reading was the authentic materials which are easy to obtain which got 63.6% from the students' questionnaire result. It seems that students would like to have the original source when they learn reading. Furthermore, the students considered the importance of integrating topics that were related to the current issue for reading text was 66.7%. The current issue of climate change nowadays was important for integrating topics in reading text.

It can be seen that the percentage was 75.8% as the highest score. Beach et al (2017) had created a book of teaching climate change. The book illustrated climate change fitting into existing lessons using available materials and assisted teachers to have teaching tools and teaching ideas to support reading and writing skills into their own classrooms. Therefore, this book could be the reference to English teachers as their teaching aid to teach reading in the classroom.

Table 2. The students' view on current wants and needs

No.	Question/Statement	Students' View	Percentage
1.	Topic desired by students in learning reading	Daily life	60.6%
2.	Students' desired input for reading	Authentic materials which are easy to obtain	63.6%
3.	Integrating topics that were related to the current issue for reading text	Important	66.7%
4.	Integrating topics which were related to climate change for reading text	Important	75.8%

Then, the students' perceptions of integrating topics that were related to climate change for reading material were assisting them to learn as the result in Figure 1.

From figure 1, the students assumed the needs of integrating climate change in reading materials in terms of training the skills related to climate change was 9.1%. Then, 18.2% of students considered it was more comprehending the content of English texts. 21.2% of students supposed it encouraged the awareness to learn climate change. Meanwhile, the students thought that it could enhance the knowledge about climate change (30.3%). Other reason was also 30.3% of students felt it improved the English proficiency especially in reading skill. The highest score was 42.4% that students figured it encouraged motivation in learning English. By learning climate change in reading materials, the students could

get motivation. As Saripah & Syukri (2017) elaborated motivation is important to achieve the objectives of teaching and learning process.

Azizah et al (2020) conveyed that providing reading materials that are appropriate for students' interest can motivate them in reading and increase their reading skill proficiency. Thus, the needs to integrate climate change in reading material in motivating students are essential thing. It is in line to Mart (2012) who said that climate is important to provide an environment that encourages both achievement and motivation. Teachers who create warm and accepting yet professional atmospheres will foster persistent efforts and attitudes conducive to learning. According to Weller (2005), interesting teaching materials, such as booklets, posters, or practice equipment, motivate students by taking their attention and curiosity.

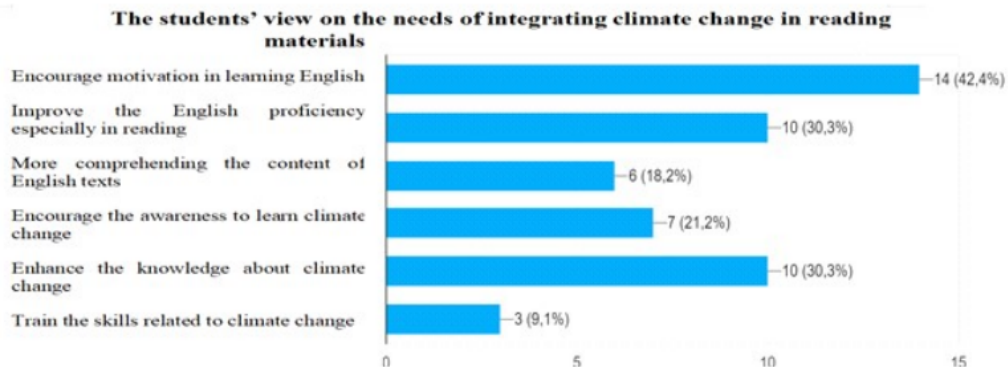


Figure 1. The students' view on the needs of integrating climate change in reading materials

The aspects of climate change that the students needed to be integrated into English reading materials can be seen in figure 2.

From the figure, most of students (48.5%) needed to learn climate change related to environment. Other students (39.4%) chose climate as the aspect of climate change needed. 33.3% of students assumed extreme weather as

the other aspect. Temperature was 21.2% that students picked. Then, 12.1% of students selected earth and greenhouse effect. The data obtained could be the basic of kinds of the aspects of climate change that should be integrated to develop the reading materials. OECD (2011) told that some aspects mentioned should be integrated into development planning.

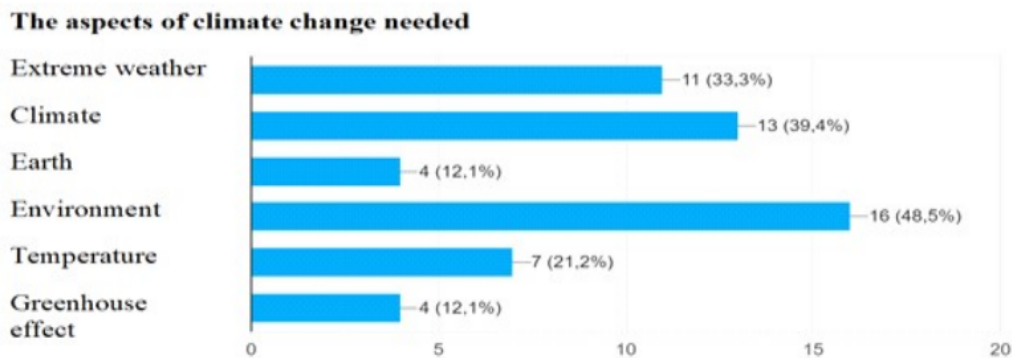


Figure 2. The aspects of climate change needed

The students' reading difficulties in Figure 3 showed that there were certain factors that the students faced during their learning. From the figure, it can be seen that the students' were difficult to comprehend the main idea of a passage. The percentage was 48.5%. Then, comprehend certain words was 27.3% as other factors. 18.2% of students assumed that it was

difficult to comprehend the detail information of a text. Arranging the chronological order of event (15.2%) was obtained and 12.1% of students made a conclusion related to cause and effect was the least difficulty in learning reading skill. Thus, to develop the reading materials, the aspects of reading comprehension as Nisa et al (2018) cited in Mikulecky & Jeffries (1998) stated was

appropriate to propose. The aspects were main idea, detail information, vocabulary and inference in reading comprehension

Present Situation Analysis (PSA)

This part focused on the present students' proficiency in English, the materials learned, and

Students' difficulties in reading skill

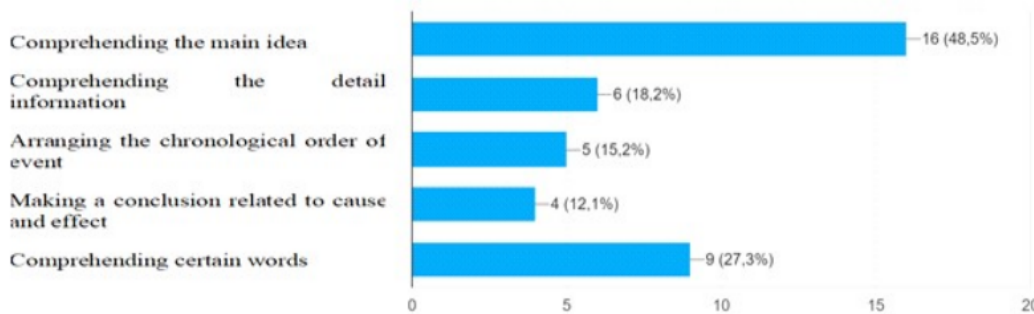


Figure 3. Students' difficulties in reading skill

climate change knowledge of the students. In Figure 4, it shown that the students' current proficiency level of English. The intermediate level was 27.3% in red of this chart and 6.1% of advance level in orange. 66.7% in purple of this chart, the students admitted that their current proficiency level of English was in the beginner level. The highest score was in the beginner level. OECD (2013) had conducted a survey by using questionnaire to adult skills to obtain their proficiency level. Thus, in this case, the students thought that they needed to learn a lot about English.

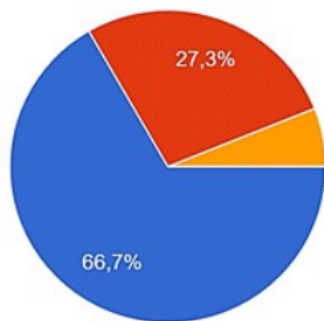


Figure 4. Students' current proficiency level of English

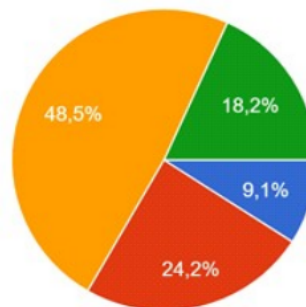


Figure 5. Students' current proficiency in comprehending the reading text

In figure 5, it showed the students' current proficiency in comprehending the reading the texts. They assumed that they had good enough in comprehending the reading texts as it can been in 48.5% (orange) as the highest score. Other perspectives were various scores such as 24.2% (red) of students admitted good, 18.2% (green) was poorly, and 9.1% (blue) was very good.

The students' view on the existing reading materials learned or provided at school can be shown in table 3. Students' viewed easy (51.5%) of the difficulty level of reading texts in English

coursebook. Then, 72.7% of students considered that the topics of reading texts in English coursebook were interesting. Narrative as the kind of text commonly found or learned in learning English was 69.7%. In addition, 45.5% was the lowest score because the English teacher sometimes provided reading materials or texts and the questions related to the general knowledge of students' study program for reading. Meanwhile, the English teacher were often in providing reading materials or texts and the

questions related to climate change for reading. The percentage was 48.5%. In sum, the students often had the reading materials related to climate change. Hence, it was suggested from Nussbaum et al (2017) that the students needed some understanding of climate change-related subject to solve some misconceptions they may obtained while learning.

The students' view on their current knowledge about climate change can be seen from the data available in table 4.

Table 3. The existing materials learned and provided

No.	Question/Statement	Students' view	Percentage
1.	The difficulty level of reading texts in English coursebook	Easy	51.5%
2.	The topics of reading texts in English coursebook	Interesting	72.7%
3.	The kind of text commonly found or learned in learning English	Narrative	69.7%
4.	The frequency of English teacher provided reading materials or texts and the questions related to the general knowledge of students' study program for reading	Sometimes	45.5%
5.	The frequency of English teacher provided reading materials or texts and the questions related to climate change for reading	Often	48.5%

The students' knowledge about climate change was enough (54.5%). Most of students (63.6%) was considered environment on the aspects of climate change that the students know. 42.4% of students assumed reading material of subject at school as the way students know about climate change. The percentage was 54.5% of students know only in students' place for the scope of climate change. 45.5% of the students assumed that they knew detailed information of

what, why and how of climate change. Based on the data, the students' view about reading material on climate change of subject at school was the lowest score (42.4%). Therefore, reading material on climate change at school was needed by the students.

Based on the students' view on their knowledge on climate change, The activities that the students could do are shown in figure 6.

The data shown that 6.1% of students

Table 4. The students' climate change knowledge

No.	Question/Statement	Students' View	Percentage
1.	Students' knowledge about climate change	Enough	54.5%
2.	The aspects of climate change that the students know	Environment	63.6%
3.	The way students know about climate change	Reading material of subject at school	42.4%
4.	The scope of climate change that the students know	In students' place only	54.5%
5.	The students' knowledge level of climate change	Know detailed information of what, why and how of climate change	45.5%

considered that promote preventing climate change outside the region or abroad as the lowest score. Take an active role in preventing climate change was 24.2%. Then, the students' activity in preventing climate change in terms of increasing their knowledge and understanding of climate change was 39.4%. The highest, 60.6% of students selected to apply ways to prevent climate change in daily life. Based on the data, it shown that the students would like to have knowledge about climate change a lot. They also would like to apply ways to prevent climate change in daily life. One of the ways is by educating students about climate change in providing reading materials. The Curriculum Framework for Primary and Secondary Education 2015 - 2022 by UNICEF (2017) stated that students become proactive participants in reducing and mitigating climate change throughout the program. Schools have become centers of information on climate change.

Strategy Analysis

This part presented the students' preference in learning reading. The data obtained are showed

in figure 7. The figure showed that 30.3% of students preferred comprehending the text by translating. 27.3% of students conveyed that discussing content of the text in a group. Then, reading aloud with correct pronunciation and intonation was chosen by students (24.2%). The other ways of learning reading were reading and answering the questions related to the text individually (21.2% students) and analyzing new vocabulary based on the context (6.1% students). Those activities could be the strategies to students while learning reading.

The students' needs viewed by the English teachers

The result was taken from the interview with English teacher. The question was whether the purpose of English learning in curriculum fulfilled. She said

“Yes, but the purpose of learning achievement has not been fulfilled yet. The reason is that the students majoring in social (IPS) have low English proficiency in both vocabulary and pronunciation.

From her statement, she has fulfilled the

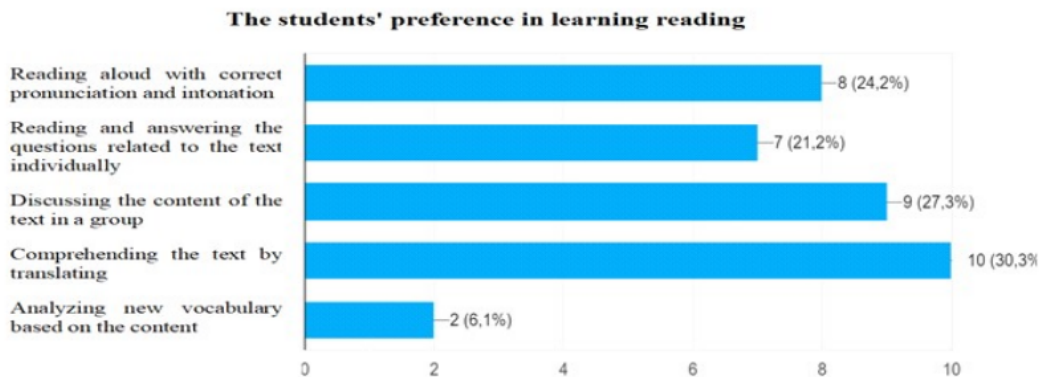


Figure 5. The students' preference in learning reading

purpose of English learning in curriculum. Yet, students' ability also became the indicator of this purpose. Therefore, the teachers should find the strategy to achieve it. Next, English teacher was asked about the difficulties of reading materials especially report text, in learning English. Her answer was:

"In learning reading materials of English, the difficulties are students lack of pronunciation, students' dialect, and lack of vocabularies while reading a text. At first, when students read the materials, their pronunciation are low and their dialects arise. After reading, they need to translate meaning of the text which spending a lot of time so that they need dictionary or internet access to translate it."

Most English teachers faced these difficulties, as Denton et al. (2020), Ismail et al. (2017), Kasim & Raisha (2017), Oakhill et al. (2019), Roberts et al. (2021), Satriani (2018), Sirem & Bas (2021), Vaughn et al. (2021), Wanzek et al. (2020), & Zimmermann, et al. (2019) state in their studies. Next, the English teacher conveyed that,

"Report texts are not available yet in the syllabus of eleventh grade students so that the students have not learned it."

The students were not learning it yet because of not having report text reading material in the syllabus. Then, she clarified that,

"Analytical Exposition text is the text that existed in syllabus so that it is being taught in the classroom. It is appropriate for the eleventh grade students because it is more scientific than descriptive text or narrative text. This text resembles to report text. In syllabus, analytical exposition text discusses climate change"

The availability of analytical exposition text reading materials in the syllabus was being benchmark to learn it by students. The similarity of analytical exposition text and report text was both were scientific texts. After that, she explained about climate change,

"Climate change is natural phenomena, climate intensity in very long period and weather changes. The main causes are from global warming, high rainfall, polar ice caps melting, and disaster."

There are many factors of climate change that happen, as she mentioned. Subsequently, she also delivered,

"Climate change topic is needed in report text reading materials to learn by the students regarding having supplementary

materials and the knowing phenomenon in everyday life. If a disaster happens, the students know why it happens or the disaster's process so that they are expected to give the information to their family."

In this case, she hoped that report text reading materials on climate change were considered to be developed in obtaining many benefits. Moreover, she added her statement that,

"The important things of integrating climate change to report text reading materials are its generic structure, contents, update information and valid sources. The textbooks of government publishing are expected to have updated information and valid sources. I hope that the experts could give accurate information."

In her opinion, she assumed that the government's textbook should have an updated information and valid sources. She added some recommended topics of climate change to be in reading materials as follows,

"The topics should be included are about the integration of climate change to the disaster happens nowadays such as flooding and extreme weather."

In the last part, she expected,

"Additionally, I hope that while learning at school, they need to have practical knowledge, not only the concept. After graduating, the students are expected to be useful for society. Maybe one of them will be counseling who give accuracy and valid information. Then, they will be aware and do climate action so that they will not be apathetic."

Therefore, from her explanation, the needs to develop reading materials in terms of report texts on climate change are required.

The students' needs viewed by the stakeholders

The view on climate change of reading

materials from the assistant curriculum was as follows.

She put forward:

"Climate change is crucial topic to the students regarding the availability of this matter in the syllabus. According to this, we should apply it in the teaching and learning process. It can be the conceptual topic for students in learning English."

In this case, she knew the importance of learning climate change in English as conceptual topic. She recommended applying this while learning English based on the syllabus.

She hoped:

"The students consider to know more on climate change in learning English subject because it is usually available in Geography subject. It seems odd to them. Hence, they should understand climate change of learning English in the form of reading materials."

Her statement was the students were expected to understand climate change reading material in English. Therefore, developing reading materials based on climate change was essential to meet the students' needs and administer them.

Based on the identification and analysis of student needs examined by students, English teacher and stakeholders, it was necessary to underline certain points. English was crucial to help students communicate with other people, students' English proficiency was still at the beginner level because they faced difficulties in learning reading, report text is reading materials that needed by students so that there was a need to develop it with climate change topics, students still lacked knowledge about climate change, and there was no report text of English reading materials provided which incorporate climate change in that school.

From those results, English as a subject in Senior High School was expected to enhance the students' career. Thus, to achieve advance level of the students' proficiency in English, there should

be an effort to struggle. One of the efforts is to provide suitable materials for the students. Regarding reading skills, the material should involve aspects of reading comprehension. Cooper, Warncke & Shipman, (1988) said that these aspects such as the main idea, detailed information, references, inferences or vocabulary should be taught and practised to students.

Integrating reading materials to climate change needs to be developed as Arozaq et al. (2017) reported that providing reading materials based on climate change enhances students' learning outcomes. The result of their study was effective in learning using the reading guide. Although, there were no studies related to integrating climate change in reading materials. Therefore, the need of developing reading materials on climate change is essential.

■ CONCLUSIONS

The needs of integrating reading materials on climate change is based on the unavailability of reading materials especially report text in the eleventh grade students' of English textbook. If the material are not available or cannot meet the needs of the students, it is vital to develop the material—one of them by integrating reading material on climate change. The first thing to do is to do a needs analysis. By doing a needs analysis, there will be a lot of information obtained, and it can relate to needs, wants, lack of study, and even preference in the students' learning style. Regarding the results of the needs analysis of this study, it is suggested to develop supplementary report text reading material integrating climate change that matches the English proficiency of the students.

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