



# Feasibility of Class X Indonesian Language Teaching Modules with Independent Curriculum

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**Abstract.** Shifting the curriculum in education affect the use of teaching modules. Teaching modules used by educators must be in accordance with the objectives of the independent curriculum. This article aims to describe the feasibility or suitability of the teaching modules with the independent curriculum. This is qualitative descriptive research with content analysis methods. The object of this study is Class X Indonesian language teaching module downloaded from <https://ayoguruberbagi.kemdikbud.go.id> page. The subject of this research is the contents of the teaching module downloaded from the Learning and Sharing Teacher compiled by DTC. This research applies document study data analysis techniques. The author reads the document and relates it to the indicators and then concludes whether it is in accordance with the independent curriculum. This study proves that the class X Indonesian language teaching module compiled by DTC is in accordance with the independent curriculum based on three predetermined indicators. However, there is inaccuracy in writing systematic in the teaching modules which was indicated by the lack of quotations or sources in students' reading materials and incorrect writing of bibliography.

**Keywords:** Teaching module · feasibility · independent curriculum

## 1 Introduction

Teaching module is one of the tools to represent the implementation of Independent Curriculum. Teaching modules are tools used by educators to obtain learning objectives which previously received using textbooks. This is due to changes in the curriculum. [1] states that curriculum is an attempt to provide the foundation and important characteristics of a range of education in such a system that educators can implement it in schools. Curriculum currently used in Indonesia is independent curriculum. [2] argues that the concept of an independent learning curriculum between educators and students works together in creating a more active and productive learning concept for educators as well as students. The Independent Learning Curriculum is a curriculum with various kinds of intracurricular learning with the purpose to make students have more ideal and perceptions and strengthen their competencies [3]. The concept of an independent

curriculum is the development of independence thinking process, where the freedom of thought is determined by how educators apply learning methods. [4] argues that curriculum changes will always affect textbooks in schools, it is not uncommon for content errors to occur that are not in accordance with the applicable curriculum. Changes in learning aspects, one of which is the change in teaching materials used by educators, are results of changes in the curriculum.

[5] said that the objective of independent learning is to make educators, students, and parents have pleasant atmosphere. With the changes in the curriculum, it is hoped that education in Indonesia will improve. This of course requires cooperation between educators. Educators must adapt the learning processes to the applicable curriculum, such as [6] which states that teachers should harmonize and comply with the principles expected and demanded by the government like changing the concept of teaching materials.

The previous curriculum used textbooks as teaching materials for learning. Textbooks play a important function in the learning process, which is to support learning quality improvement [7]. In the Independent Curriculum, the term teaching materials was changed into teaching modules. [8] argues that modules as learning resources have several advantages such as overcoming time constraints, increasing motivation and enthusiasm for independent learning, and easing teachers' load. According to [9] the preparation of teaching modules in the independent curriculum must be based on Learning Guidelines and Assessments because the concept of the vision and mission of preparing teaching modules is to guide educators in carrying out the learning process. [10] said that the Independent Learning program was launched by the Minister of Education, Culture, Research and Technology (Kemendikbud Ristek) Nadiem Makarim as a form of improvement from the 2013 curriculum. The components of teaching modules must be prepared by teachers according to the needs of students. Educators must develop teaching modules by paying attention to various aspects and objectives of independent learning itself. Unsystematic and unstable transitional periods demand educators, professors, researchers and educational strategists to always create updates [11]. In line with the opinion [12] which says that every curriculum that is designed and implemented requires several different disciplines.

Teaching modules are a substitute for Learning Implementation Plans (RPP) whose nature and systematics vary such as learning material or content, learning methods, explanations, and evaluation techniques which are arranged in a systematic and attractive manner in order to accomplish predetermined achievement indicators. From a glanced look on the rules, it can be temporarily concluded that Independent Curriculum has several advantages compared to 2013 Curriculum, such as teacher can be freely creative and decide on learning priorities [13]. The preparation of the teaching modules must also be adjusted to develop soft skills and Pancasila Student Profile. Additionally, educators must also pay attention to the suitability of the material with the theme and goals of independent learning in preparing teaching modules or teaching materials. Textbooks are books that contain detailed material on certain subjects or fields which are arranged systemically and have been filtered based on certain required achievements [14]. Textbooks is appropriate when it has been arranged systematically and in accordance with

the curriculum. The feasibility of the content set by the BSNP (National Education Standards Agency) is described in the national education content standards. The differences between 2013 Curriculum and Independent Curriculum lie in: 1) The curriculum structure stipulates that 20% -30% of lesson hours are used for developing the character of Pancasila Student Profile (PPP) through project-based learning; 2) Learning Outcomes arranged per phase (2–3 years) as a substitute for Core Competence (KI) and Basic Competence (KD) so that teachers and schools have more flexibility in designing innovative curriculum and learning; 3) Study hours are arranged annually; and 4) Informatics subjects are compulsory [15].

The goals of national education are also made from various references including the results of analysis in Indonesia and at the national level, which is one of the formulations of the Pancasila Student Profile [16]. There are six dimensions in the Pancasila Student Profile (PPP) including 1) faith, fear of God Almighty, and noble character, 2) global diversity, 3) work together, 4) independent, 5) critical reasoning, and 6) creative. As part of the activities in accordance with the curriculum components, these dimensions are consolidated into Learning Outcomes (CP), learning objectives, as well as learning materials. With the strengthening of critical reasoning abilities in the learning outcomes of all subjects is one example of how the Pancasila Student Profile is manifested in the subject matter. Books prepared for schools have a distinctive character in terms of content, description, material and form. Every reading material used in schools should be able to support each learning process and student skills by referring to the objectives of the applicable curriculum [17].

One of the textbooks used in learning Indonesian language in the independent curriculum is the teaching module. Teaching modules are arranged by educators in accordance with the objectives of the independent curriculum. "Ayo Guru Berbagi dan Belajar" is a platform where educators can share and learn about independent curriculum. This platform can be used by educators to download teaching modules as a reference. More users share their modules will result in more contents versions. Therefore, it requires a study of the contents of the module to understand if it is in accordance with the independent curriculum. [18] argues that systematic presentation techniques in accordance with indicators are examples of things that must be considered in the presentation of books, besides the learning presentation that refers to the curriculum.

This activity needs to be done so that students get quality learning material to improve various competencies. Learning has the essence of planning or designing as an effort in the learning process [19]. One of the examples is designing teaching modules. Educators must be able to choose and determine quality learning materials that will be used in the teaching and learning process. Textbooks used must meet the criteria as quality learning materials. In addition, this textbook must contain aspects of the objectives of the independent curriculum, which are Pancasila student profile and soft skills development.

The relevant research is [20] which examines "Analysis of the Feasibility of the Content of Class XII Indonesian Language Textbooks Published by the 2018 Revised Edition of the Ministry of Education and Culture". This research found that the contents in the textbooks analyzed were feasible even though there were several indicators components that must be improved [20]. The researcher used a qualitative descriptive method with the subject of Indonesian language textbooks for class XII SMA/MA/SMK/MAK

published by the 2018 revised edition of the Ministry of Education and Culture. The object of research was the feasibility of the contents of the textbook material. There is also [21] who researched "Evaluation of Feasibility of Content, Material, Language and Readability in High School Indonesian Language Textbooks". In his research, the researcher concluded that the material, presentation and language aspects did not meet the established criteria. Class X books can be used as a source of teaching materials. The material, presentation and language aspects do not meet the predetermined criteria. Class XI books are not suitable for use as a source of teaching materials. From the description of the research above, the research discusses the feasibility of the content of textbooks in the 2013 curriculum and evaluation of the feasibility of the contents of Indonesian language textbooks in senior high schools. According to [22] the content in textbooks must be adapted to the current curriculum [22]. Therefore, this study aims to discuss the suitability or feasibility of the material in the class X Indonesian language teaching modules which are prepared with the Independent Curriculum. This research is expected to provide theoretical and practical benefits. Theoretical benefits are expected to be the results of the analysis which can be used as a reference for Indonesian language subject teachers in preparing teaching modules that are in accordance with the characteristics of students according to the independent curriculum. The practical benefit is that it is hoped that this research can be used as reference material for teachers in preparing teaching materials that are better and in accordance with the Independent Curriculum.

## 2 Method

This research is descriptive qualitative research with content analysis methods. Content analysis aims to describe complex data which will later be drawn conclusions from each indicator. The descriptive method is a method used to obtain information about data by analyzing or interpreting the data [23]. The object of this research is the Class X Indonesian language teaching module downloaded from <https://ayogurubagi.kemdikbud.go.id>. The subject of this research is the contents of the teaching module downloaded from the Learning and Sharing Teacher compiled by DTC. The data in this study are the contents of each chapter.

This study used documentary study data collection techniques. Researchers will read the contents of the Class X Indonesian language teaching module which is downloaded from <https://ayogurubagi.kemdikbud.go.id>. Researchers will conduct a document study by reading each element and matching the material according to the feasibility indicators including (1) conformity with Learning Outcomes, (2) content of Pancasila Student Profiles, and (3) content of soft skill development material.

The data analysis technique used is domain analysis technique. The researcher first looked for an overview of the contents of the teaching module by reading the module and writing an overview of the module. After obtaining the results of the analysis of the contents of each module, the contents of the material are analyzed on the Learning Outcomes, the contents of the Pancasila Student Profile (PPP) and the contents of the soft skills. The next stage is drawing conclusions. The results of the data analysis will be concluded whether it is in accordance with the rules of the Independent Curriculum module or not.

### 3 Result and Discussion

Based on the document study and data analysis, the results and discussion are obtained based on three indicators. Distribution of components were found on the three indicators. The components consist of general information, core components, and attachments. These components have sections that show compatibility with the Independent Curriculum according to the three indicators (Table 1).

#### 3.1 Compatibility of Content with Learning Outcomes

In the teaching module prepared by DTC entitled Text of the Observation Report explains the learning outcomes, namely "Students are able to evaluate and create information in the form of ideas, thoughts, feelings, views, directions or accurate messages from listening to various types of texts (nonfiction and fiction) in the form of monologues, dialogues and speech titles" which are in phase E (Fig. 1). These learning outcomes emphasize listening activities, as also written in the element/domain indicators in the teaching module of the general information section.

**Table 1.** Component Parts

Component	Parts of Components Found
General information	<ul style="list-style-type: none"> <li>- Learning Outcomes</li> <li>- Learning methods</li> <li>- Facilities and infrastructure</li> <li>- Learning Resources</li> </ul>
Core component	<ul style="list-style-type: none"> <li>- Learning objectives</li> <li>- Meaningful Understanding</li> <li>- Trigering Question</li> <li>- Learning Activities</li> <li>- Reflection</li> </ul>
Attachment	<ul style="list-style-type: none"> <li>- Reading material</li> <li>- Activity Sheet</li> <li>- Bibliography</li> </ul>

Fase / Kelas	E / X
Capaian Pembelajaran	Pada akhir fase E, Peserta didik mampu mengevaluasi dan mengkreasi informasi berupa gagasan, pikiran, perasaan, pandangan, arahan atau pesan yang akurat dari menyimak berbagai tipe teks (nonfiksi dan fiksi) dalam bentuk monolog, dialog, dan gelar wicara.
Direct Translation: Phase: E/ X <b>Learning Achievement:</b> At the end of phase E, students are able to evaluate and create information in the form of ideas, thoughts, feelings, views, directions or messages that are accurate from listening to various types of texts (non-fiction and fiction) in the form of monologues, dialogues, and talk shows.	

**Fig. 1.** General information (learning phases and outcomes)

Learning outcomes become the foundation in developing the Learning Objectives Flow (ATP). In the teaching module Indonesian prepared by DTC is shown in part II (core components) and attachments. The core component consists of several activity flows, the flow is arranged based on Learning Outcomes (CP) such as learning objectives, meaningful understanding and learning activities from the initial meeting to assessment.

Based on the data, the Learning Objectives (TP) compiled by DTC are in accordance with the Learning Outcomes (CP). This is shown in the words evaluate, understand and analyze which are compiled using Bloom’s Taxonomy. As explained in the Learning and Assessment Guide book, Bloom’s Taxonomy is considered more appropriate to the context of learning at this time. [24] said that to formulate learning objectives, educators work on their concepts using the key words they have collected in the previous stage. It can be said that the learning objectives are in accordance with the learning outcomes because the keywords used are information and ideas.

Meaningful understanding is used to connect concepts designed by the teacher to form student behavior [25]. The teaching module is also in accordance with the learning outcomes, which is the stage of "associating the lesson with the importance of objectivity in Observation Result Report". This is related to the Learning Outcomes (CP) of students so that they are good at creating information in the form of ideas, feelings, directions or accurate messages from listening. With this stage it can stimulate students to express their ideas and views regarding objectivity in a Observation Result Report (LHO).

<b>Bagian II: Komponen Inti</b>	
<b>Tujuan Pembelajaran</b>	<ol style="list-style-type: none"> <li>1. Mengevaluasi informasi yang tidak akurat dan bias dalam laporan hasil obsevasi dengan kritis dan reflektif.</li> <li>2. Memahami dan menganalisis gagasan dalam laporan hasil observasi dengan kritis dan reflektif.</li> </ol>
<b>Pemahaman Bermakna</b>	Setelah mempelajari teks Laporan hasil Observasi peserta didik dapat mengevaluasi informasi secara kritis dan peserta didik dapat mengaitkan hikmahnya dengan pentingnya objektivitas dalam sebuah laporan hasil observasi
<b>Pertanyaan Pematik</b>	<ul style="list-style-type: none"> <li>- Seperti apakah laporan hasil observasi yang objektif?</li> <li>- Bagaimana menggunakan informasi lain untuk mendukung hasil observasi kalian?</li> <li>- Mengapa laporan hasil observasi harus objektif?</li> </ul>

<p>Direct Translation:                      Section 2: Core components  <b>Learning objectives:</b>                      1. Evaluate inaccurate and biased information in observation reports critically and reflectively                      2. Understand and analyze the ideas in the observation report critically and reflectively  <b>Meaningful Understanding:</b>                      After studying the text of the Observation Report, students can evaluate information critically and students can relate the lesson to the importance of objectivity in an observation report.  <b>Triggering Question:</b>                      -What is objective observation report?                      -How to use other information to support your observations?                      -Why observation report should be objective?</p>
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**Fig. 2.** Core Components

Triggering questions used to stimulate students before learning started. These questions are already related to learning outcomes that stimulate the Observation Result Report material to provide accurate or objective ideas.

Next is the learning activities. Flow of learning activities is in accordance with the predetermined learning outcomes, which is listening stage. Some schools have formulated the Education Unit Operational Curriculum (KOSP) before the first learning begins. The pointers include learning objectives and the Learning Objectives Flow [25]. In the flow of learning activities above there is a stage of listening to the contents of the discourse read by each student and the stage of responding to differences in information delivered, which are in accordance with the learning outcomes that have been set at the beginning, which is "creating ideas, thoughts, feelings, views, directions or messages from listening various types of text". There is also a stage where students listen to videos and compare information (Fig. 4).

The reflection section is also in accordance with the learning outcomes that have been determined. In the reflection section, there are instructions to verbally answer on the learning activities. These instructions stimulate students to verbally answer and to practice material comprehension. This activity is related to Learning Outcomes (CP), which is being able to evaluate and create thoughts, messages in the form of monologues, dialogues, and talk shows (Fig. 5).

In the assessment, the DTC assessment section uses the LKPD to carry out formative assessments. DTC arranges two activities on LKPD. The first activity is that students are asked to listen to information and compare their predictions before and after listening. The second activity is to provide basic explanation of the text of the Observation Result Report whose structure has been analyzed. The worksheets are structured in a way so that students can develop their abilities and achieve Learning Outcomes (CP) determined through project activities. Independent curriculum has the advantage that there are certain

<ul style="list-style-type: none"> <li>• Mintalah setiap perwakilan kelompok untuk mempresentasikan informasi yang didapat dari wacana yang diperdengarkan.</li> <li>• Siswa lain menyimak dan menanggapi dengan kritis jika ada perbedaan informasi yang disampaikan.</li> </ul>
<p>Direct translation :</p> <ul style="list-style-type: none"> <li>• Ask each group representative to present the information obtained from the discourse that is heard.</li> <li>• Other students listen and respond critically if there are differences in the information delivered.</li> </ul>

**Fig. 3.** Learning activities

<p><b>Refleksi</b></p> <p>Siswa diminta untuk menjawab secara lisan mengenai kegiatan pembelajaran hari ini. Guru dapat memberikan skala 0–100 yang dapat dipilih siswa untuk menunjukkan pemahaman mereka terhadap materi maupun aktivitas yang telah dilakukan.</p>
<p>Direct Translation:</p> <p>Reflection:</p> <p>Students are asked to answer verbally about today's learning activities. Teachers can give a scale of 0-100 that students can choose to show their understanding of the material and activities that have been carried out.</p>

**Fig. 4.** Reflection

### Lembar Aktivitas Kegiatan 1

Activity Sheet, activity 1

Kalian akan menyimak laporan hasil observasi berjudul Belalang Angrek yang akan dibacakan secara bergiliran dalam satu kelompok. Sebelum menyimak, silakan kalian perhatikan tabel berikut.

1. Tentukan apakah empat pernyataan berikut benar atau salah!
2. Bandingkanlah prediksi kalian dengan informasi yang didapatkan setelah menyimak!
3. Tulislah bukti informasi yang mendukung kebenaran atau kesalahan pernyataan tersebut!
4. Bandingkan jawaban kalian dengan jawaban teman-teman kalian!

*Direct translation:*

*You will listen to the "Orchid Grasshopper" observation report, which you will read in one group. Before attending, please pay attention to the following table.*

1. Determine whether the following four statements are true or false!
2. Compare your predictions with the information obtained after listening!
3. Write down evidence supporting the statement's truth or falsity!
4. Compare your answers with the answers of your friends!

### Kegiatan 2

Activity 2

Selain sifat informasi yang disampaikan, laporan hasil observasi juga memiliki ciri khas lain pada struktur teksnya. Kalian dapat mencoba memahami struktur teks laporan hasil observasi dengan menganalisis laporan hasil observasi berjudul "Belalang Angrek" di atas. Jika kalian cermati, penulis laporan membagi laporannya ke dalam tiga penjelasan pokok. Apa sajakah tiga penjelasan pokok tersebut?

*Direct translation:*

*In addition to the nature of the information conveyed, observation reports also have other characteristics in the structure of the text. You can try to understand the design of the text of the observation report by analyzing the observation report entitled "Orchid Grasshopper" above. If you pay close attention, the writer divides his messages into three main explanations. What are the three main explanations?*

**Fig. 5.** Activity sheet

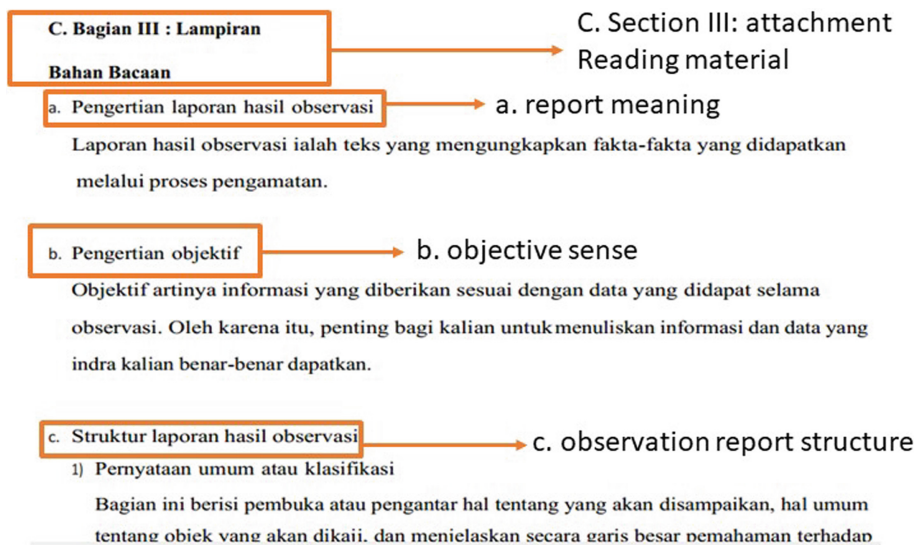
projects that must be carried out by students so that they will be more active in trying to explore themselves [26]. The activities in the LKPD support the extent to which students' ability to listen to the observations entitled "Belalang Angrek" which reads in turns. These activities are relevant to the Learning Outcomes (CP) that have been set at the beginning, which is evaluating and creating information.

However, the reading material is not in accordance with the Learning Objectives that have been set as shown in Fig. 6. Because independent curriculum emphasizes project-based learning, it is better if the student's reading material also support this type of learning. The student reading material in Fig. 6. Contains only theoretical material regarding the Observation Result Report. It would be better if the reading material contained the steps in evaluating the text and the steps in analyzing an idea in the Observation Result Report.

### 3.2 Pancasila Student Profile Content (PPP)

[27] stated that Pancasila Student Profile describes the figures of Indonesian students as lifelong learners who are competent, have character, and act according to Pancasila values. Therefore, Indonesian students really need to have this profile. In accordance with the opinion [28] that the Pancasila Student Profile (PPP) is capability, character, and competence that needs to be possessed by 21st Century Indonesian students. In the module compiled by DTC there are two Pancasila Student Profiles (PPP) which are contained in the teaching module. The Pancasila Student Profiles (PPP) are Critical Reasoning and Global Diversity. These contents are compiled by DTC and are integrated into learning activities, as explained (Fig. 7 and Fig. 8).





**Fig. 6.** Attachment (Reading Material)

The contents of the Pancasila Student Profile are shown in learning activities. Critical Reasoning Points are shown in listening and responding to the text information given in the Observation Result Report (LHO). Figure 7 shows that there are activities to discuss and respond to information critically. This is in accordance with the Pancasila Student Profile (PPP) on the theme of critical reasoning. [28] argues that the key components of critical reasoning are obtaining and processing information and ideas, analyzing and evaluating reasoning, and reflecting and evaluating one's own thoughts. In line with the opinion of [29] which says that elements of critical reasoning include obtaining and processing information and ideas and reflecting on thoughts and thinking processes, which is in accordance with the learning activities of Fig. 1. The learning activity stage proves that the contents of the Pancasila Student Profile (PPP) in the class X Indonesian language teaching module compiled by DTC contain critical reasoning points (Fig. 7).

According to [30] the key elements of global diversity are knowing and appreciating culture, intercultural communication skills in interacting with others, reflect and being responsible for the experience of diversity. Diversity is also shown in the learning activities of joint discussion stage or joint decision making in accordance with elements of global diversity by interacting together.

Pancasila Student Profiles (PPP) can also be included into the text in the LKPD about Observation Result Reports entitled "Tonggaret" and "Bunga Anggrek". The text is an Observation Result Report related to nature and animals, meaning that indirectly by reading the text students can recognize the uniqueness of their locality..

### 3.3 Soft Skill Development Contents

Soft skills are one of the most important factors for someone to have in the future, such as the ability to communicate and work with others, solve problems, and other aspects of

<ul style="list-style-type: none"> <li>• Setelah seluruh siswa membacakan bagian wacananya, siswa mengecek tabel prediksi yang telah diisi dengan informasi yang didapat.</li> <li>• Siswa mendiskusikan isian tabel prediksi dengan siswa lain. Mereka juga dapat bertukar informasi terkait pernyataan yang didapat.</li> <li>• Mintalah setiap perwakilan kelompok untuk mempresentasikan informasi yang didapat dari wacana yang diperdengarkan.</li> <li>• Siswa lain menyimak dan menanggapi dengan kritis jika ada perbedaan informasi yang disampaikan.</li> </ul>
<p>Direct translation :</p> <ul style="list-style-type: none"> <li>• After all students read the discourse, students check the prediction table that has been filled with the information received.</li> <li>• Students discuss the content of prediction tables with other students. They can also exchange information regarding the statements received.</li> <li>• Ask each group representative to present the information obtained from the discourse that was heard.</li> <li>• Other students listen and respond critically if there are differences in the information presented.</li> </ul>
<ul style="list-style-type: none"> <li>• Siswa mendiskusikan hasil jawaban mereka dalam kelompok.</li> <li>• Beberapa perwakilan siswa menyampaikan hasil diskusinya.</li> <li>• Guru memberikan apresiasi berupa pujian dan menyampaikan kunci jawaban</li> <li>• Guru memberi kesempatan kepada siswa untuk bertanya atau menyampaikan pendapat.</li> <li>• Siswa dan guru menyimpulkan pembelajaran hari ini.</li> <li>• Guru menutup pembelajaran.</li> </ul>
<p>Direct translation :</p> <ul style="list-style-type: none"> <li>• Students discuss the results of their answers in groups.</li> <li>• Several student representatives present the results of their discussions.</li> <li>• The teacher gives appreciation in the form of compliments and provide the correct answer.</li> <li>• The teacher gives students the opportunity to ask questions or express opinions.</li> <li>• Students and teachers conclude today's lesson.</li> <li>• The teacher closes the lesson.</li> </ul>

**Fig. 7.** Critically responding activities

emotional intelligence [31]. The contents of soft skill development are found in learning activities and LKPD. There is a discussion stage, express opinions and ideas, assignments that stimulate students to think critically, creatively and confidently as well as reading texts that contain knowledge to gain insight. These contents will stimulate students in developing soft skills that will be useful for themselves. The soft skills contained in this teaching module are broad-minded, self-confident, teamworking, critical, creative, and train students' public speaking through learning activities. The development of soft skills teaches values and norms, self-control, communication, motivation, creative thinking, politeness, honesty and exemplary so that students have good personality and character [32]. There are five teaching module contents that are useful for the development of students' soft skills, among others.

Based on the data in Fig. 8, the stages or flow contained in the core activities at meeting 1 contain several contents aimed at developing students' soft skills. For example, group discussion activities aim to develop students' soft skills in teamwork. Activities to respond to information to train students' criticality. Video listening activities, comparing information, and providing opportunities to ask questions to broaden students' insights.

Based on the data in Fig. 9, the core activities of 2nd meeting include activities to develop students' soft skills to broaden their horizons by searching for videos or

<p><b>Kegiatan Inti (60 Menit)</b> <b>Pertemuan 1</b></p> <ul style="list-style-type: none"> <li>• Guru menyiapkan teks Belalang Angrek yang sudah dibagi menjadi 4–5 bagian ke dalam amplop yang berbeda.</li> <li>• Bagilah siswa ke dalam beberapa kelompok yang terdiri dari 4–5 siswa.</li> <li>• Guru menyampaikan gambaran aktivitas dan penjelasan terkait "tabel prediksi"</li> <li>• Guru memberikan amplop berisi potongan-potongan teks Belalang Angrek kepada setiap kelompok.</li> <li>• Dalam satu kelompok, setiap siswa membacakan isi amplop masing-masing secara bergiliran dan siswa lain menyimak.</li> <li>• Setelah seluruh siswa membacakan bagian wacananya, siswa mengecek tabel prediksi yang telah diisi dengan informasi yang didapat.</li> <li>• Siswa mendiskusikan isian tabel prediksi dengan siswa lain. Mereka juga dapat bertukar informasi terkait pernyataan yang didapat.</li> <li>• Mintalah setiap perwakilan kelompok untuk mempresentasikan informasi yang didapat dari wacana yang diperdengarkan.</li> <li>• Siswa lain menyimak dan menanggapi dengan kritis jika ada perbedaan informasi yang disampaikan.</li> </ul>
<p>Direct translation : Core Activity (60 Minutes) Meeting 1</p> <ul style="list-style-type: none"> <li>• The teacher prepares the text "Belalang Angrek," divided into 4-5 parts in different envelopes.</li> <li>• Divide students into several groups consisting of 4–5 students.</li> <li>• The teacher present an overview of activities and explanations related to the "prediction table."</li> <li>• The teacher gives each group envelopes containing pieces of the "Belalang Angrek" text.</li> <li>• In one group, each student reads the contents of each envelope in turn, and the other students listen.</li> <li>• After all, students read the discourse and check the prediction table that has been filled in with the information obtained.</li> <li>• Students discuss the content of prediction tables with other students. They can also exchange information regarding the statements obtained.</li> <li>• Ask each group representative to present the information obtained from the heard discourse.</li> <li>• Other students listen and respond critically if there are differences in the information presented.</li> </ul>

**Fig. 8.** Core Activities meeting 1

<p><b>Pertemuan ke 2</b></p> <ul style="list-style-type: none"> <li>• Siswa dapat mencari video atau sumber informasi lain di internet tentang tonggaret.</li> <li>• Siswa pun dapat membandingkan informasi pada buku teks dengan informasi dari sumber lain tersebut. Sebelumnya, bimbinglah siswa agar dapat memilih video atau informasi yang tepat untuk diakses. Panduan berikut dapat menjadi acuan awal.       <ol style="list-style-type: none"> <li>a. Masukkan kata kunci yang spesifik berkaitan dengan tema yang dibahas.</li> <li>b. Pilihlah situs atau laman yang dibuat oleh lembaga pemerintah atau lembaga lain yang terpercaya. Situs dengan lembaga pemerintah biasanya diakhiri dengan ".go.id". Adapun situs yang dikeluarkan oleh pihak sekolah atau kampus biasanya diakhiri dengan domain (ranah) "sch.id" atau "ac.id"</li> <li>c. Hindari "meng-klik" iklan atau pemberitahuan yang muncul secara tiba-tiba (pop-up).</li> <li>d. Segera tutup laman jika menampilkan gambar ataupun video yang kurang pantas.</li> </ol> </li> </ul>
<p>Direct translation: 2nd meeting</p> <ul style="list-style-type: none"> <li>• Students can search the internet for videos or other sources of information about <i>tonggaret</i>.</li> <li>• Students can also compare information in textbooks with information from other sources. Previously, guide students so they can choose the right video or information to access. The following guide can be an initial reference.       <ol style="list-style-type: none"> <li>a. Enter specific keywords related to the theme discussed.</li> <li>b. Choose a site or page created by a government or other trusted agency. Sites with government agencies usually end in ".go.id". The sites issued by the school or campus usually end with the domain (domain) "sch.id" or "ac.id"</li> <li>c. Avoid "clicking" on ads or notifications that appear suddenly (popups).</li> <li>d. Immediately close the page if it displays an inappropriate image or video.</li> </ol> </li> </ul>

**Fig. 9.** Meeting activity 2

other sources of information from the internet and comparing them. With the activity of searching for videos students will have a broad understanding because through the process of searching for videos students will not only focus on one source, there will be

<b>Refleksi</b>
Siswa diminta untuk menjawab secara lisan mengenai kegiatan pembelajaran hari ini. Guru dapat memberikan skala 0–100 yang dapat dipilih siswa untuk menunjukkan pemahaman mereka terhadap materi maupun aktivitas yang telah dilakukan.
Direct Translation: Reflection: Students are asked to answer verbally about today's learning activities. Teachers can provide a scale of 0-100 that students can choose to show their understanding of the material and activities that have been carried out.

**Fig. 10.** Reflection

many sources contained on the website. Students Indirectly read from various sources and have various understandings.

In the reflection section (Fig. 10), DTC has also arranged activities to improve students’ soft skills, namely answering orally today’s learning activities. The activity aims to develop students’ public speaking, students’ creativity in answering, and also self-confidence. Answering verbally will improve students’ speaking skills by answering confidently.

In the LKPD section there are activities that stimulate students to think critically as seen from the activity of comparing information after listening. In activity two it also stimulates students to think critically and carefully by analyzing the structure of the text of the Observation Result Report. This activity is in accordance with the Independent Curriculum, which is developing students’ soft skills in each lesson.

**Lembar Aktivitas Kegiatan 1**

Activity Sheet, activity 1

Kalian akan menyimak laporan hasil observasi berjudul *Belalang Angrek* yang akan dibacakan secara bergiliran dalam satu kelompok. Sebelum menyimak, silakan kalian perhatikan tabel berikut.

1. Tentukan apakah empat pernyataan berikut benar atau salah!
2. Bandingkanlah prediksi kalian dengan informasi yang didapatkan setelah menyimak!
3. Tulislah bukti informasi yang mendukung kebenaran atau kesalahan pernyataan tersebut!
4. Bandingkan jawaban kalian dengan jawaban teman-teman kalian!

*Direct translation:*  
You will listen to the "Orchid Grasshopper" observation report, which you will read in one group. Before attending, please pay attention to the following table.  
1. Determine whether the following four statements are true or false!  
2. Compare your predictions with the information obtained after listening!  
3. Write down evidence supporting the statement's truth or falsity!  
4. Compare your answers with the answers of your friends!

**Kegiatan 2**

Activity 2

Selain sifat informasi yang disampaikan, laporan hasil observasi juga memiliki ciri khas lain pada struktur teksnya. Kalian dapat mencoba memahami struktur teks laporan hasil observasi dengan menganalisis laporan hasil observasi berjudul "*Belalang Angrek*" di atas. Jika kalian cermati, penulis laporan membagi laporannya ke dalam tiga penjelasan pokok. Apa sajakah tiga penjelasan pokok tersebut?

*Direct translation:*  
In addition to the nature of the information conveyed, observation reports also have other characteristics in the structure of the text. You can try to understand the design of the text of the observation report by analyzing the observation report entitled "Orchid Grasshopper" above. If you pay close attention, the writer divides his messages into three main explanations. What are the three main explanations?

**Fig. 11.** LKPD Activities 1 and 2

### 3.4 Compatibility with the Independent Curriculum

Overall, the teaching modules are quite in accordance with the independent curriculum. Starting from its systematics and content, class X Indonesian language teaching module compiled by DTC can be said to be compatible and appropriate for use as teaching module. The systematics of teaching modules starts from the general information section, core components, attachments, LKPD, assessment rubrics, advanced activity sheets, bibliography, glossary, and diagnostic assessment sheets. It is a complete systematics and also in accordance with the independent curriculum flow. As for the content in the teaching module, it is in accordance with the Independent Curriculum and refers to Learning Outcomes (CP), Pancasila Student Profile (PPP) and also the development of students' soft skills. According to [9] the Independent Curriculum teaching module is mandatory based on the Learning Guide and Assessment because the basis of the vision and mission of preparing teaching modules is to guide educators in carrying out the learning process. It's just that the reading material does not include the source where the material was taken. There are no citations to the material to ensure the validity of the data. According to [33] teaching materials are guidelines used by teachers when providing learning materials, so from this the validity of the data or source material must be clear and diverse. In addition, the bibliography has not been written using good and correct bibliography writing, only links are included. Because currently Indonesia has entered the digital era, learning in the Independent Curriculum also refers to technology familiarization. The details will be described in (Fig. 12).

Based on the data, DTC has not included valid sources to ensure the correctness of reading sources. Good material should contain a quote from a trusted journal or book from at least one source. It is because the source of information as well as the stimulants are needed, considering the presentation of certain material can influence the reader's attitude [34]. In addition, the presentation of material or reading materials must also

<p><b>C. Bagian III : Lampiran</b></p> <p><b>Bahan Bacaan</b></p> <p>a. Pengertian laporan hasil observasi</p> <p>Laporan hasil observasi ialah teks yang mengungkapkan fakta-fakta yang didapatkan melalui proses pengamatan.</p> <p>b. Pengertian objektif</p> <p>Objektif artinya informasi yang diberikan sesuai dengan data yang didapat selama observasi. Oleh karena itu, penting bagi kalian untuk menuliskan informasi dan data yang indra kalian benar-benar dapatkan.</p>
<p>Direct translation :</p> <p><b>C. Part III: Attachment</b></p> <p><b>Reading material</b></p> <p>a. Understanding the results of the observation report</p> <p>The observation report is a text that describes the facts obtained through the observation process.</p> <p>b. Objective definition</p> <p>Objective means that the information provided is in accordance with the data obtained during the observation. Therefore, it is important for you to write down the information and data that your senses actually get.</p>

**Fig. 12.** Reading Materials

stimulate students to think imaginatively and critically. This is in line with the opinion [35] that the presentation of material can stimulate students' imagination and creative thinking through illustrations, case analysis, and exercises in developing knowledge competencies and skill competencies. The content of the material itself is already in accordance with the Learning Objectives of the Observation Result Report.

Based on Fig. 13, DTC has not written down the sources in the correct format and only contains a few sources. It is better if to write a bibliography following the basic rules for writing a bibliography, for example the procedures for writing from websites, books, or from YouTube (Fig. 14).

<p>Daftar Pustaka</p> <p>Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia.2021. Cerdas Cergas Berbahasa dan Bersastra Indonesia Untuk SMA/SMK kelas X. Jakarta: Pusat Kurikulum dan Perbukuan Badan Penelitian dan Pengembangan dan Perbukuan Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi</p> <p><a href="https://www.bola.com/ragam/read/4315736/pengertian-ciri-ciri-struktur-dan-contoh-teks-laporan-hasil-observasi">https://www.bola.com/ragam/read/4315736/pengertian-ciri-ciri-struktur-dan-contoh-teks-laporan-hasil-observasi</a></p> <p><a href="https://youtu.be/QloqMruGbkc">https://youtu.be/QloqMruGbkc</a></p> <p><a href="https://youtu.be/RtduVl_t0vY">https://youtu.be/RtduVl_t0vY</a></p>
<p>Direct translation :</p> <p>Bibliography</p> <p>Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia.2021. Cerdas Cergas Berbahasa dan Bersastra Indonesia Untuk SMA/SMK kelas X. Jakarta: Pusat Kurikulum dan Perbukuan Badan Penelitian dan Pengembangan dan Perbukuan Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi</p> <p><a href="https://www.bola.com/ragam/read/4315736/pengertian-ciri-ciri-struktur-dan-contoh-teks-laporan-hasilobservasi">https://www.bola.com/ragam/read/4315736/pengertian-ciri-ciri-struktur-dan-contoh-teks-laporan-hasilobservasi</a></p> <p><a href="https://youtu.be/QloqMruGbkc">https://youtu.be/QloqMruGbkc</a></p> <p><a href="https://youtu.be/RtduVl_t0vY">https://youtu.be/RtduVl_t0vY</a></p>

**Fig. 13.** Bibliography

Independent Curriculum is intended to face digitalization era. The teaching modules compiled by DTC are in accordance with the objectives of the Independent Curriculum, which is utilizing internet sources as other sources of material and also using digital facilities and infrastructure in learning (Fig. 14). This is in accordance with [36] stated that the concept of independent curriculum are learns to mix literacy abilities, knowledge competence, skills and attitudes as well as mastery of technology.



**Fig. 14.** Means and Sources

**Table 2.** Components Found

Indicator	General Information	Core Components	Attachment
Conformity of content with Learning Outcomes	V	V	V
Pancasila Student Profile Content	V	V	-
Soft skill development content	V	-	V

## 4 Conclusion

Based on the results of the research and discussion, it can be concluded that the teaching modules compiled by DTC are sufficient to meet the indicators in the Independent Curriculum starting from the compatibility of the content with learning outcomes, the content of the Pancasila student profile, and the content of developing soft skills. In the Learning Outcome (CP) indicator, the content in the module compiled by DTC is in accordance with the Learning Outcome (CP) in the predetermined phase. The flow of Learning Objectives (ATP) is in accordance with the learning outcomes, assessments, and learning outcomes that have been determined. These sections are spread over general information, core components and attachments.

In the Pancasila Student Profile (PPP) indicator, the content in this module is in accordance with the Pancasila Student Profile (PPP) specified in the general information section, but not with global diversity content. The content consists of critical reasoning and global diversity. Critical reasoning is shown in every part of discussion, responding, giving ideas and assessment activities. Global diversity content is shown in discussion activities since discussions can train students to get to know their classmates from different regions. However, in order to comply with the Pancasila Student Profile (PPP), it is better if the student reading material discusses the Observation Result Reports on Borobudur temple site and so on which can introduce Indonesian culture through writing to students. These indicators are spread over general information and core components.

In terms of soft skill development indicators, the contents of the teaching modules compiled by DTC include broad-mindedness, confidence, teamwork, criticality, creativity, and train students' public speaking. This is shown in the flow of learning activities and Student Worksheets (LKPD). Soft skill development indicators are located in general information and attachments.

Overall the teaching modules meet the indicators of the Independent Curriculum, but in the systematics there are reading materials that do not include valid verbal sources and the writing of bibliography is not in accordance with good bibliographical writing and with the concept of the Independent Curriculum, which is utilizing digital devices..

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## References

1. A. Muchti and Y. C. Dewi, "Feasibility of Indonesian Language Textbooks Published by Balitbang Ministry of Education and Culture with 2013 Curriculum 2016 Revision," *Jurnal Ilmiah Bina Edukasi*, vol. 12, no. 2, pp. 16–30, 2019.
2. F. Zabadi, "Examining Independent Learning in Indonesian Curriculum 2013 Teaching Materials," in *Seminar Nasional SAGA #3, 2021*, vol. 3, no. 1, pp. 154–164.
3. F. Jannah, T. Irtifa, and Dkk, "the Problems of implementing the Independent Curriculum," *Al Yazidy: Ilmu Sosial, Humaniora, dan Pendidikan*, vol. 4, no. 2, pp. 55–65, 2022.
4. Y. Apriliana, "Analysis of Feasibility of Content and Language of Student Textbooks Indonesian Language 2013 Curriculum Class VII SMP/MTs Published by the Ministry of Education and Culture of the Republic of Indonesia 2017 Revised Edition," *Jurnal Pendidikan Bahasa dan Sastra Indonesia*, vol. 7, no. 6, pp. 704–713, 2017.



5. B. A. Syukir, "Measuring the Concept of Independent Learning," 2020. [Online]. Available: <https://intens.news/Menakar-Konsep-Merdeka-Belajar>.
6. S. A. P. Sriasih, I. M. Astika, and N. M. R. Wisudariani, "Conformity of Revised Edition Middle School Class VIII Indonesian Textbooks with the 2013 Curriculum Syllabus," in *Prosiding Seminar Nasional Bahasa dan Sastra Indonesia #1*, 2021, pp. 67–77.
7. L. E. Rahmawati, D. Kurniawati, H. Kusmanto, Y. Nasucha, and A. Ngalim, "The Relevance of Reading Materials Presentation in Indonesian Textbook for Grade Vii Junior High School: Learner Characteristics Review," *Universal Journal of Educational Research*, vol. 8, no. 12, pp. 7047–7053, 2020.
8. N. komang lina Merta sari, N. K. Widiratini, and M. D. Anggendari, "Development of Embroidery Teaching Materials Based on Independent Learning Kampus Merdeka," *Jurnal BOSAPARIS: Pendidikan Kesejahteraan Keluarga*, vol. 13, no. 1, pp. 28–36, 2022.
9. R. Setiawan, F. D. Andanty, and S. Nabhan, "Development of Independent Curriculum Teaching Modules for English Subjects in Surabaya City Vocational Schools," *Jurnal Gramaswara*, vol. 2, no. 2, pp. 49–62, 2022.
10. C. Arjihan, D. Putri, E. Rindayati, and R. Damariswara, "Difficulties of Prospective Educators in Developing Learning Devices in the Independent Curriculum," *Jurnal Tindakan Kelas*, vol. 3, no. 1, pp. 18–27, 2022.
11. D. A. Utami and L. E. Rahmawati, "Development of Interactive Module-Based Teaching Materials for A1 Level BIPA Students," *KREDO : Jurnal Ilmiah Bahasa dan Sastra*, vol. 3, no. 2, pp. 277–294, 2020.
12. P. Kurniati, A. L. Kelmaskouw, A. Deing, B. Bonin, and B. A. Haryanto, "The Independent Curriculum Innovation Process Model Its Implications for 21st Century Students and Teachers," *Jurnal Citizenship Virtues*, vol. 2, no. 2, pp. 408–423, 2022.
13. L. Ayundasari, "Implementation of a Multidimensional Approach in Learning History of the Independent Curriculum," *Sejarah dan Budaya: Jurnal Sejarah, Budaya dan Pengajarannya*, vol. 16, no. 1, pp. 225–234, 2022.
14. I. Sari, F. Nikmah, T. I. Rahayu, and S. P. T. Utami, "Feasibility of the Content of Class X Indonesian Textbooks 2016 Revised Edition Judging from the Implications of a Scientific Approach in the Revised 2013 Curriculum," *DWIJA CENDEKIA: Jurnal Riset Pedagogik*, vol. 2, no. 1, pp. 24–31, 2018.
15. L. U. Sadieda, B. Wahyudi, and R. D. Kirana, "Implementation of the Blended Learning Model in Learning," vol. 7, no. 1, pp. 55–72, 2022.
16. N. Zuriyah and H. Sunaryo, "Construction of the Pancasila Student Profile in the PPKn Education Teacher's Handbook in Elementary Schools," *Civic Hukum*, vol. 7, no. 1, pp. 71–87, 2022.
17. H. M. Jatmika, "Feasibility Analysis of Physical Education Textbooks Class X Senior High School in Bantul Regency, Special Region of Yogyakarta," *Jurnal Pendidikan Jasmani Indonesia*, vol. 10, no. 2, pp. 62–67, 2014.
18. F. Aritonang and T. R. Pangaribuan, "Feasibility Analysis of the Content of Indonesian Language Textbooks for Class XII High Schools Based on the 2013 Curriculum Published by the Ministry of Education and Culture," *BASASTRA Jurnal Bahasa, Sastra, dan Pengajarannya*, vol. 10, no. 2, pp. 131–140, 2021.
19. L. A. Setyowati, "Eligibility Textbooks on Indonesian Language and Literature Specialization Group for Class XI Language and Culture by Private Publishers," *Jurnal Pendidikan Bahasa dan Sastra Indonesia*, vol. 7, no. 1, pp. 34–39, 2018.
20. G. Wulandari, M. S. Indriani, and G. Nurjaya, "Feasibility Analysis of the Content of Class XII Indonesian Textbook Materials Published by the 2018 Revised Edition of the Ministry of Education and Culture," *Journal of Digital Learning and Education*, vol. 1, no. 3, pp. 141–149, 2021.

21. G. D. Mayandri, Haryadi, and P. Rahayu, "Evaluation of Feasibility of Content, Material, Language, and Readability in Senior High School Indonesian Language Textbooks," *Asas : Jurnal Sastra Keterbacaan Pada Buku Ajar*, vol. 11, no. 1, 2022.
22. K. Ulinuha and J. Widodo, "Feasibility Analysis of the Content of Class X High School Economics Textbooks Based on the Education Unit Level Curriculum (KTSP) in Semarang Regency," *Economic Education Analysis Journal*, vol. 5, no. 1, pp. 206–218, 2016.
23. Aprillia, A. Saepurokhman, D. Irawan, and A. Irianto, "Feasibility Analysis of Indonesian Language Textbook Class IX SMP/MTS by E.B. Devita Ekawati and Siti Isnatun M.," *LITERAT: Jurnal Pendidikan Bahasa dan Sastra Indonesia*, vol. 1, no. 1, 2022.
24. Y. Anggraena et al., *Learning Guide and Assessment Assessment for Early Childhood Education, Elementary Education, and Secondary Education*. 2022.
25. U. Maulida, "Development of Independent Curriculum-Based Teaching Modules," *Tarbawi*, vol. 5, no. 2, pp. 130–138, 2022.
26. I. N. Suwija, "Indonesian and Regional Language Learning According to the Independent Learning Curriculum," ... : *Seminar Nasional Pendidikan Bahasa dan Sastra ...*, vol. 4, no. April, pp. 119–135, 2022.
27. S. Hamdi, C. Triatna, and N. Nurdin, "Independent Curriculum in a Pedagogic Perspective," *SAP (Susunan Artikel Pendidikan)*, vol. 7, no. 1, pp. 10–17, 2022.
28. D. Irawati, A. Muhamad Iqbal, A. Hasanah, and B. S. Arifin, "Profile of Pancasila Students as an Effort to Realize National Character," *Edumaspul: Jurnal Pendidikan*, vol. 6, no. 1, pp. 1224–1238, 2022.
29. R. Sartria, P. Adiprima, K. S. Wulan, and T. Y. Hajatanaya, *Pancasila Student Profile Strengthening Project. Badan Standar, Kurikulum, dan Asesmen pendidikan*, 2022.
30. K. Setyowati, I. Arifin, and Juharyanto, "Principles of the Pancasila Student Profile," *Seminar Nasional Manajemen Strategik Pengembangan Profil Pelajar Pancasila Pada Pendidikan Anak Usia Dini (PAUD) dan Pendidikan Dasar (DIKDAS)*, vol. 1, no. 5, pp. 1–8, 2022.
31. S. Siswati, "Development of Soft Skills in the Curriculum to Face the Industrial Revolution 4.0," *Edukasi: Jurnal Pendidikan*, vol. 17, no. 2, p. 264, 2019.
32. V. Sriwahyuningsih and M. Barseli, "The Effectiveness of Student Soft Skill Development in Critical Thinking through Co / Extra Curricular Activities at School," *Jurnal Pendidikan Tambunsai*, vol. 6, no. 2, pp. 16451–16456, 2022.
33. K. Khairullah, A. T. Priyadi, and M. Martono, "Feasibility of Indonesian Language Learning Devices Made by Private MTs Pontianak Teachers during the Covid-19 Pandemic," *Jurnal Kajian Pembelajaran dan Keilmuan*, vol. 5, no. 2, p. 111, 2021.
34. P. Octaviani and L. E. Rahmawati, "Accuracy of Anecdote Text Material in Class X High School Indonesian Textbooks," *Jurnal Pendidikan Bahasa Indonesia*, vol. 7, no. 2, p. 149, 2019.
35. O. P. Wardani, "Feasibility Analysis of Content and Language in High School Textbooks 'Indonesian Self-Expression and Academics' Kelas X SMA," *Jurnal Pendidikan Bahasa Indonesia*, vol. 5, no. 2, pp. 75–82, 2018.
36. J. Boang Manalu, P. Sitohang, N. Heriwati, and H. Turnip, "Development of Independent Learning Curriculum Learning Devices," 2022, vol. 1, no. 1, pp. 80–86.

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