# Development of Context-Based English Learning Materials for Automotive Vocational High School Students

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Abstract. This study examined the development of context-based English learning materials for Grade 11 automotive students at SMKN 1 Nglegok, addressing the need for vocationally relevant English resources within the Merdeka Curriculum framework. Using a Research and Development approach, the study created five units focused on automotive language needs, such as workshop communication and customer interaction, employing Context-Based Learning (CBL) principles to enhance real-world applicability. Feedback from teachers and students indicated high satisfaction with the materials' relevance, comprehensive language components, and engaging, interactive elements. Positive responses highlighted the materials' role in improving job readiness, though some feedback suggested the need for refinements, such as adjusting language complexity and incorporating more multimedia support to address diverse proficiency levels. Overall, this research highlights the importance of context-specific English materials in vocational education, providing foundational insights for future enhancements to better equip students with practical language skills for industry applications.

Keywords: Context-Based Learning, Vocational English, Automotive Education

### 1. INTRODUCTION

A vocational school, unlike general high or upper secondary education, plays a crucial role in supporting students' personal development. Additionally, it equips them with advanced skills that are essential for their future careers, ensuring they are well-prepared to enter the workforce [1]. The vocational high school curriculum (such as in Indonesia, Turkey, Thailand, and Malaysia) includes a focus on industry-specific skills, with certain mandatory subjects introduced in the first year of study. Recently, the Indonesian Curriculum became the Merdeka Curriculum. The Merdeka Curriculum focuses on essential materials and character development, promoting innovative learning methods [2]. Its aim to foster creative critical thinking, collaboration, and communication skills, relevant to 21st-century demands [3], [4]. The curriculum prepares students for diverse careers by emphasizing high-order 4C skills and lifelong learning [5]-[7].

Nadiem Anwar Makarim described it as concise and flexible, encouraging a new paradigm of "freedom" in education, and fostering enjoyable learning experiences [8]. This freedom enhances independent thinking and supports a pressure-free learning environment [4], [9], [10]. Ultimately, the curriculum emphasizes student-centred learning, with teachers as facilitators [11].

Compared to contemporary English Language Teaching (ELT), the Merdeka Curriculum is not suitable for that. It places a strong focus on developing communicative abilities as learning objectives. Language learners study English primarily to acquire effective communication skills. In vocational high schools, "ELT is tailored to equip students with specific communicative competencies that will be applicable in their future workplaces" [12]. ELT materials are therefore designed to help students communicate effectively in real job settings, ensuring alignment between their school learning and professional needs [13], [14]. Additionally, ELT teachers are encouraged to develop instructional materials that address the students' future workplace needs, as highlighted in the Standard of Content for vocational high schools, which aims to enhance students' intelligence, knowledge, personality, character, and skills—critical assets that can serve as life skills for their professional lives.

Currently, the English learning materials at SMKN 1 Nglegok are generic and do not adequately address the specific language demands of students enrolled in automotive and other technical fields. This deficiency hinders their ability to develop proficiency in English that is directly applicable to their future careers, thus limiting their job market readiness. Recognizing this gap, the current research aims to develop context-based English learning materials specifically designed for grade 11 automotive students at SMKN 1 Nglegok. This initiative is not merely an academic endeavour but a direct response to practical educational needs and government directives emphasizing the development of communicative competence among students [15]. Such regulations underline the necessity for educational resources that integrate English language skills with vocational competencies, ensuring graduates are equipped for the demands of their industries.

Moreover, the urgency of this research is heightened by the discrepancy between existing English learning materials and the diverse vocational programs at SMKN 1 Nglegok. As students' progress in automotive engineering and other technical fields, they require language proficiency aligned with the specific terminology, communication needs, and workplace contexts of their disciplines. Without tailored materials, students may struggle to connect theoretical knowledge with practical application, potentially impacting their ability to excel in their chosen careers. This study aims to bridge this critical gap by developing context-based English learning materials for automotive students that incorporate essential automotive terminologies, workplace communication skills, and relevant practical language exercises. By enhancing students' language proficiency in contexts directly related to their vocational training, the research seeks to improve overall job readiness and employability.

The significance of Context-Based Learning (CBL) as a pedagogical approach enhances this research framework. CBL emphasizes integrating real-life contexts into the learning process, promoting student engagement and meaningful learning experiences [16]. Implementing CBL through structured models, such as the Film (media) - Simulation Design proposed by Yu et al., allows for contextualized learning that connects theoretical knowledge with practical applications, fostering a deeper understanding of both language and technical subjects [17]. Some previous studies used CBL to teach in the science field. According to King and Henderson, context-based learning has attracted substantial attention in science education due to its potential to enhance students' knowledge and application of scientific concepts [18]. It has gained significant attention in science education due to its potential to enhance students' understanding and practical application of scientific principles [17]-[19].

Numerous studies have examined the effectiveness of context-based learning in enhancing student engagement and academic performance [22]. Likewise, Yu found that "context-based learning experiences improve students' conceptual understanding and problem-solving abilities in science" [17]. Recognized as an effective teaching approach, context-based learning emphasizes realistic experiences and real-world scenarios to strengthen students' grasp and application of scientific principles [23]. Further research has focused on how context-based learning affects students' engagement and motivation in science. For example, Similarly, context-based learning positively influenced students' attitudes, enhancing their perception of science's relevance and practicality [19].

Previous studies have explored the effectiveness of CBL in various educational contexts, including enhancing English skills among students. The findings of these studies collectively indicate that context-based learning modules—whether enhancing pronunciation skills, providing tailored reading and writing materials, improving English communication through localized themes, or contributing to science education—are effective, practical, and increasingly recognized as valuable in diverse educational settings [24], [13], [25] [22]. However, this research at SMKN 1 Nglegok innovates by focusing on developing context-based English learning materials specifically for Grade 11 automotive students, setting it apart from earlier studies that concentrated on broader language skills or specific academic disciplines. The research questions are:

- 1. How to develop Context-Based English Learning materials for class 11 automotive students at SMKN 1 Nglegok?
- 2. How do they meet the needs and expectations of the students in the automotive program at SMKN 1 Nglegok?

#### 2. METHOD

This section discusses the research methodology employed in the study. It comprises several subsections that describe the research design, participants, data sources, data collection procedures, and data analysis methods.

### **Research Design**

This research aimed to develop English learning materials for an automotive program using a Context-Based Learning (CBL) approach. To achieve this, the Research and Development (R&D) method was employed. Sugiyono states that the research and development method is a research method used to create a specific product and test its effectiveness [26]. Irawan, as adapted from Borg and Gall in Fayrus et al. [27], divides the research and development process into two primary phases: predevelopment and development [12]. In the pre-development phase, a needs analysis is conducted based on students' requirements, an instructional materials model is designed, and a focus group discussion (FGD) is held. The development phase involves evaluating the instructional materials model based on the FGD outcomes, conducting a try-out at a representative vocational high school, and revising the model according to the try-out results.

### **Participant**

The research subjects were 37 eleventh-grade students enrolled in the Light Vehicle Engineering and Automotive (TKRO) program at SMKN 1 Nglegok during the 2023/2024 academic year. The school is located in Blitar, East Java, and offers specialized programs in automotive and mechanical engineering, making it an ideal setting for the study. Additionally, English teachers from the school participated as expert validators during the material development process.

#### **Data Sources**

Data were gathered from two primary sources: semi-structured interviews with English teachers and questionnaires distributed to both students and expert validators. These instruments provided comprehensive feedback on the developed materials in terms of relevance, quality, and usability.

#### **Data Collection**

The data collection procedures involved two key methods: interviews and questionnaires. The framework was made based on an Indonesian institution named Badan Standar Nasional Pendidikan (BSNP) which evaluates the quality of textbooks used in the education system. BSNP has some criteria to determine the appropriateness of the elements in the textbook used in the learning process and it has determined that the textbook must have all of the appropriate elements, those are: content, presentation, linguistics, and graphics [28]. Semi-structured interviews were conducted with English teachers to obtain detailed feedback on the materials' effectiveness. Meanwhile, the questionnaires consisted of two types: an expert validation questionnaire for material evaluation and a user satisfaction questionnaire for students. Both questionnaires used a 5-point Likert scale to gather quantitative data on the perceived quality and relevance of the materials. The data collection process took place over a period of 2 weeks and involved a systematic approach to ensure the accuracy and reliability of the collected information.

#### **Data Analysis**

The collected data were analyzed using both qualitative and quantitative methods. Qualitative data from the interviews were analyzed through thematic analysis, identifying key insights into the strengths and weaknesses of the materials. Quantitative data from the questionnaires were processed using descriptive statistics, including mean scores and percentage distribution, to measure expert and student satisfaction levels. This mixed-methods approach allowed for a comprehensive understanding of the materials' effectiveness and areas for improvement

### 3. FINDINGS

This section deals with the research findings of developing context-based English learning materials for grade 11 Automotive Students at SMKN 1 Nglegok. It consists of three parts to answer the research question of this article

# Developing Context-Based English Learning Materials for Class 11 Automotive Students at SMKN 1 Nglegok

The development of Context-Based English Learning materials for class 11 automotive students at SMKN 1 Nglegok involved a comprehensive and systematic Research and Development (R&D) process. This approach began with extensive research and information collection, where the author

focused on understanding the specific language needs and interests of the automotive students. By assessing the context in which these students would use English, the author was able to tailor the materials to be relevant and engaging. This initial phase set the groundwork for the planning of the learning materials, ensuring that they would effectively integrate English language learning with automotive concepts.

Following the research phase, the author moved into the planning stage, where the structure and content of the learning materials were outlined. The materials were designed to encompass five key units, each targeting essential language skills relevant to the automotive context.



Figure 1. Book's Cover

The first unit, titled "Welcome to My Workshop," focused on descriptions, asking and giving opinions, and providing advice, allowing students to engage in discussions about their work environment. The second unit, "Be Careful," concentrated on expressions of warning, relief, and pain, and included making report texts, which are crucial for communicating safety and incidents in a workshop setting.

The third unit, "Apply for Job," addressed the simple present tense, job identification, and the process of writing application letters, essential skills for students preparing to enter the workforce. In the fourth unit, "What Did I Do," the materials focused on the simple past tense and narrative texts, enabling students to share their experiences and recount events. Finally, the fifth unit, "Can You Fix My Car?" incorporated expressions of satisfaction and dissatisfaction, which are vital for customer interactions in the automotive industry. Each unit included a variety of activities, such as vocabulary exercises, reading comprehension, conversational practice, listening tasks, writing assignments, and speaking activities, all designed to foster group engagement and collaboration among students.

After developing the preliminary products, the author conducted preliminary field testing by seeking evaluations from two expert validators, Miss Winda and Mr. Ahmad. They assessed the materials based on four key components: content, presentation, language, and graphics. The validators provided predominantly high scores of 4 and 5, indicating that the materials were largely effective; however, they also highlighted areas needing improvement. This feedback was invaluable, prompting the author to undertake significant revisions to enhance the clarity and effectiveness of the materials.

Following the revisions based on the validators' comments, the author created the final product and implemented it in a classroom setting. The learning materials were taught to a group of 11 automotive students at SMKN 1 Nglegok. This implementation phase allowed the researcher to observe how well the materials facilitated language learning in a practical context. After the teaching sessions, a questionnaire was distributed to gauge student satisfaction with the materials. This evaluation aimed to determine whether the context-based approach effectively met the educational needs of the students and whether the materials contributed to their engagement and learning outcomes.

Overall, the systematic R&D process used in developing these Context-Based English Learning materials not only ensured that the content was relevant and tailored to the student's needs but also provided a structured approach to evaluating their effectiveness. The positive feedback from expert validators and the subsequent student evaluations indicated that the materials were well-received and

capable of enhancing the English language skills of automotive students at SMKN 1 Nglegok, preparing them for both academic and professional success in their field.

# Explore Teachers' Perspectives on The Development of Context-Based English Learning Materials in The Class 11 Automotive Program at SMKN 1 Nglegok

The exploration of teachers' perspectives on the development of context-based English learning materials for Grade 11 automotive students at SMKN 1 Nglegok reveals several key insights that illustrate the materials' effectiveness in meeting educational objectives. Teachers unanimously agreed that the developed materials align well with the learning objectives, Standards of Competence (SK), and Basic Competence (KD) for the automotive program. However, they noted that some content inadvertently included SK/KD from Grade 10. This indicates a need for careful alignment to ensure all materials are appropriate for the targeted grade level.

In terms of relevance to students' daily lives, the materials were found to effectively explore texts related to the students' experiences. The inclusion of images that reflect automotive activities helped enhance the connection between language learning and real-life applications. Educators expressed satisfaction with the completeness of the materials, noting that they adequately covered essential language components such as expressions, tenses, and the four language skills: listening, speaking, reading, and writing. The incorporation of practical elements, like barcodes for interactive activities, was highlighted as beneficial for engaging students.

Teachers also deemed the materials sufficiently aligned with up-to-date resources. They emphasized that the integration of contemporary content, supported by relevant imagery, contributed positively to the learning experience. While the language used in the materials was generally clear and appropriate for the cognitive levels of Grade 11 students, teachers suggested that additional guidance could be provided to facilitate deeper cognitive engagement with assignments.

Regarding the organization of the materials, educators considered it adequate but recommended minor adjustments to improve the flow, particularly concerning narrative elements that should have been introduced in Grade 10. The materials successfully presented a structured approach, including clear opening sections, core activities, evaluations, reflections, and summaries in each chapter or unit. Teachers noted that students showed a greater interest in these materials compared to traditional textbooks, which could encourage active learning.

The tasks within the materials were reported to effectively promote English language interaction among students, fostering a more dynamic classroom environment and encouraging independent study. Furthermore, teachers appreciated the consistent layout of the materials, highlighting the placement of titles, introductions, illustrations, and page formatting, which adhered to a coherent pattern. This consistency helped to clearly delineate text sections and enhance readability.

Finally, the professional presentation of illustrations was commended for enhancing students' comprehension of the material. The choice of fonts was noted to be easy to read, with minimal variation, contributing to the overall clarity of the content. In summary, the feedback from teachers indicates a positive reception of the context-based English learning materials, highlighting their relevance, completeness, and effectiveness in fostering student engagement and language acquisition within the automotive context. However, there are opportunities for further refinement, particularly in aligning all materials strictly with the appropriate grade levels and enhancing cognitive challenges for students.

# Assess The Level of User Satisfaction with The Context-Based English Learning Materials Developed for Class 11 Automotive Students at SMKN 1 Nglegok

Assessing user satisfaction is a critical component in the evaluation of educational materials, particularly in the context of vocational training where practical relevance is paramount. This study focuses on the level of user satisfaction with the Context-Based English Learning materials developed specifically for class 11 automotive students at SMKN 1 Nglegok. Given the unique needs of automotive students, these materials were designed to integrate language learning with industry-specific content, fostering both linguistic proficiency and practical application. To gauge student satisfaction accurately, the author distributed a questionnaire that focused on four key aspects: content, language, presentation, and graphics.

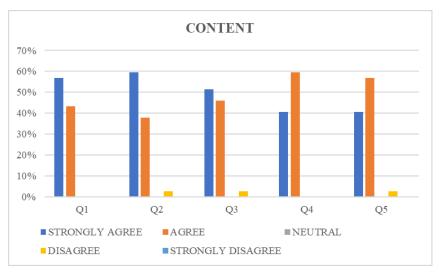


Figure 2. User's Satisfaction Result: Content Aspect

The bar chart above represents respondents' levels of agreement with various content-related statements in a survey, spanning five questions labelled Q1 through Q5. Each question's responses are categorized into five levels: "Strongly Agree," "Agree," "Neutral," "Disagree," and "Strongly Disagree." The y-axis shows the percentage of responses within each category.

Overall, the data reveals a predominantly positive response to the content, with the majority of respondents expressing agreement across all questions. For Q1 "The material developed is tailored to meet the English language needs of students in the automotive engineering department", over 60% of respondents selected "Strongly Agree," with approximately 45% choosing "Agree," Minimal negative feedback was recorded, indicating strong approval. Q2 "The material explores a wide range of texts related to the student's daily lives" displayed a similar pattern, though "Agree" slightly outweighed "Strongly Agree," still suggesting favourable perceptions. Q3 "The material teaches students about asking and giving opinions, giving warnings, describing jobs, past experiences, and expressing satisfaction and dissatisfaction" responses were split more evenly between "Strongly Agree" and "Agree," with a slight increase in disagreement, yet the overall feedback remained positive. Q4 "The material teaches students to use the simple present tense and simple past tense" had the highest proportion of "Agree" responses at approximately 60%, while "Strongly Agree" responses were slightly lower, showing some moderation in consensus. Q5 "The teaching materials (texts, tables, images, attachments, etc.) are sourced from the latest resources on the topics discussed" mirrored Q4, with a high percentage of "Agree" responses and fewer "Strongly Agree" selections, indicating continued satisfaction with the content. Across all questions, "Neutral" and negative responses were consistently low.

In conclusion, the survey results demonstrate a generally positive perception of the content, with most respondents agreeing or strongly agreeing across all questions. The dominance of positive responses, coupled with minimal disagreement, suggests that the content aligns well with respondents' expectations and requirements. Minor variations in agreement levels between questions could provide insights for potential improvements to enhance overall satisfaction further.

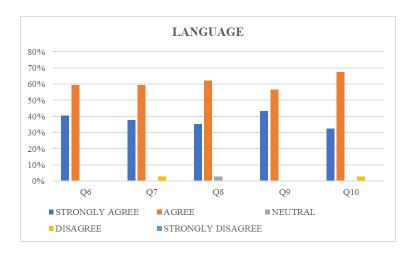


Figure 3. User's Satisfaction Result: Language Aspect

The bar chart above shows the satisfaction levels of class 11 automotive students at SMKN 1 Nglegok with language aspects of a book developed for their course. This chart represents responses across five questions (Q6 to Q10) related to the language aspects of the book. Each question's responses are broken down into five categories: "Strongly Agree," "Agree," "Neutral," "Disagree," and "Strongly Disagree," with percentages shown on the y-axis.

The data indicates a generally positive response, with the "Agree" category consistently receiving the highest percentage across all questions, followed by "Strongly Agree." For Q6 "The language used in the instructions aligns with my developmental level" and Q7 "The language used in the explanations matches my cognitive development level", over 50% of respondents selected "Agree," while around 40% chose "Strongly Agree," reflecting a high level of satisfaction. Q8 "The language used corresponds to my language abilities" shows a slightly more varied response, with "Agree" responses above 60% and a small increase in "Neutral" responses, suggesting some students may have had mixed feelings about this aspect. For Q9 "The language used is presented clearly and is easy for me to understand" and Q10 "The material presented in each unit/activity/paragraph/sentence reflects a coherent flow of ideas", the trend of dominant "Agree" responses continues, with "Strongly Agree" responses also relatively high, though a minor percentage of "Disagree" responses appears, indicating areas that may not fully meet student expectations.

In conclusion, students seem to be broadly satisfied with the aspects of the book represented by questions Q6 through Q10. The high levels of agreement indicate that the book's content and structure align well with students' learning needs. However, the slight presence of neutral and negative feedback, particularly for Q8 and Q10, suggests there may be specific features that could be refined to enhance user satisfaction further. To address this, targeted improvements, such as adding more interactive elements or real-world examples, may help to increase engagement and satisfaction with the book's content.

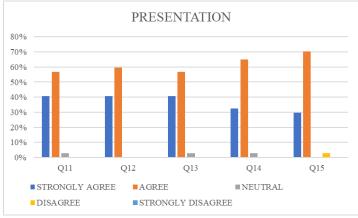


Figure 4. User's Satisfaction Result: Presentation Aspect

The chart above illustrates students' responses to the presentation of context-based English learning materials designed for Grade 11 automotive students at SMKN 1 Nglegok. Five questions (Q11 to Q15) assess students' perceptions, with response options ranging from "Strongly Agree" to "Strongly Disagree." Overall, the results show a positive reception, with most students expressing satisfaction with the materials.

In questions Q11 "The developed material consistently presents an introduction, main activities, evaluation, reflection, and summary in each chapter/unit", Q12 "Assignments are presented in a balanced manner in each unit/chapter", and Q13 "The types of assignments in this unit are presented in a variety of forms", responses were primarily split between "Strongly Agree" and "Agree," each accounting for around 40-60% of the responses. This indicates that students found the presentation of materials to be generally well-aligned with their learning needs. The high percentage of agreement suggests that students felt the materials were presented effectively, meeting their expectations for clarity and relevance in relation to their automotive studies.

For Q14 "The presentation of assignments in the developed material encourages interaction in English" and Q15 "The assignments in this unit encourage me to be active in class and to study independently", the responses show particularly high levels of "Agree," reaching close to 70%. This strong agreement indicates that students were especially satisfied with the clarity and coherence of the materials presented in each unit, activity, paragraph, or sentence. The high ratings in these areas suggest that students found the learning materials to be logically organized and easy to follow, enhancing their learning experience.

Overall, the minimal presence of "Neutral," "Disagree," and "Strongly Disagree" responses across all questions reflects a low level of dissatisfaction. Most students responded favourably, highlighting the effectiveness of the context-based approach used in developing these English learning materials. This feedback suggests that the materials successfully meet the needs of automotive students by providing clear, relevant, and well-structured content.

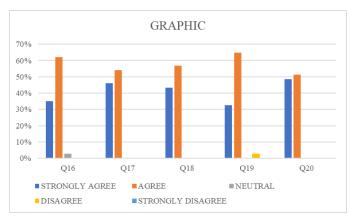


Figure 5. User's Satisfaction Result: Graphic Aspect

The chart above presents the student's responses to the graphic elements in the context-based English learning materials developed for Grade 11 automotive students at SMKN 1 Nglegok. The responses are based on five questions (Q16 to Q20), with options ranging from "Strongly Agree" to "Strongly Disagree." The overall results indicate a positive perception of the graphic elements in the learning materials.

For Q16 "The placement of layout elements (title, foreword, illustrations, and pages) on each page follows a consistent pattern", over 60% of students selected "Agree," while approximately 30% chose "Strongly Agree." This distribution suggests that students felt the placement of layout elements, such as titles, forewords, illustrations, and pages, was consistent throughout the material, aiding clarity and ease of navigation.

In Q17 "The arrangement of text at the end of each paragraph is clearly separated", more than half of the students (around 55%) agreed that the text arrangement, particularly at the end of each paragraph, was clearly separated, and about 40% strongly agreed with this statement. The high agreement rates indicate that students found the text layout clear and easy to follow, which likely contributes to better readability and comprehension.

Question Q18 "Illustrations are professionally placed and enhance my understanding of the information presented" shows a similar trend, with around 50% of students selecting "Agree" and 40%

selecting "Strongly Agree," indicating that the illustrations were considered well-placed and helpful in enhancing their understanding of the information presented. This positive response reflects the effective use of visuals in supporting student comprehension.

In Q19 "The developed material does not use too many font types", the "Agree" response reaches around 60%, with a small percentage selecting "Disagree." This response suggests that while most students found the number of font types used appropriate and not overwhelming, a few students might have preferred even fewer variations to further simplify the material.

Finally, Q20 "The material uses an easy-to-read font type" results reveal that students found the font style easy to read, with approximately 50% selecting "Agree" and 40% choosing "Strongly Agree." This positive reception underscores the importance of font readability in supporting students' engagement with the material.

Overall, the feedback on graphic elements in the English learning materials is highly positive. The consistent layout, clear text arrangement, well-placed illustrations, limited font variations, and easy-toread font style all contribute to an effective learning experience for automotive students. This indicates that the graphic design considerations in the developed materials successfully meet the needs of the target students, enhancing both readability and comprehension.

Table 1. The Strength and Areas to Improve of Each Aspect		
Aspect	Strengths	Areas for Improvement
Content Quality	<ul> <li>Strong alignment with automotive students' needs</li> <li>Covers essential language skills</li> <li>Positive feedback on relevance and practicality</li> </ul>	Minor variations in agreement could provide insights for further enhancements
Language Elements	Generally positive responses regarding language clarity	<ul> <li>Mixed feelings about language complexity; some students felt it didn't match their cognitive level.</li> <li>Targeted refinements needed to cater to diverse proficiency levels</li> </ul>
Presentation	8	Need for more interactive elements to enhance student involvement
Graphic Design	<ul> <li>Positive feedback on layout consistency and text arrangement</li> <li>Well-placed illustrations enhance readability and comprehension</li> </ul>	Some students preferred even fewer font variations for simplicity

(Source: Data of Researcher, 2024)

The assessment of user satisfaction regarding the Context-Based English Learning materials for class 11 automotive students at SMKN 1 Nglegok reveals several strengths and areas for improvement. The most outstanding aspect is the content quality, which received overwhelmingly positive feedback, with the majority of respondents expressing strong agreement that the materials are tailored to the specific needs of automotive students, explore relevant texts, and cover essential language skills. This indicates that the materials effectively integrate language learning with practical, industry-specific content. Similarly, the presentation of the materials was well-received, with students reporting high satisfaction regarding the organization, clarity, and coherence, which encourages active engagement and aligns with effective pedagogical practices. Additionally, the graphic design elements garnered positive feedback, highlighting effective layout consistency, clear text arrangement, and well-placed illustrations that enhance readability and comprehension.

However, there are aspects that require improvement. While the language elements generally received favourable responses, there were indications of mixed feelings, particularly regarding alignment with students' abilities; for instance, some students expressed neutrality or disagreement about whether the language used resonated with their cognitive levels. This suggests a need for refinement to ensure that the language complexity matches the diverse proficiency levels within the student cohort. Moreover, despite expressing satisfaction with the clarity of assignments, the minor

presence of neutral and negative feedback regarding engagement in learning activities indicates potential room for improvement. To address this, introducing more interactive elements or real-world examples in the materials could enhance student involvement and motivation.

To further improve the materials, conducting focus groups to gather deeper insights into student experiences with the language aspects would be beneficial. This understanding can inform refinements to better align language use with students' needs. Additionally, incorporating more interactive and multimedia elements, such as videos or simulations relevant to the automotive field, can increase engagement and provide practical applications of the language learned. Tailoring language complexity through differentiated instruction or supplemental resources could also better cater to students who need more assistance. Overall, while the assessment indicates successful development of educational materials that meet automotive students' needs, enhancing the language aspects and engagement strategies could lead to even higher levels of satisfaction and more effective learning outcomes.

#### 4. DISCUSSION

This section deals with the discussion of the research findings. The discussion has discussed the result and the theory which is supported the result.

# Developing Context-Based English Learning Materials for Class 11 Automotive Students at SMKN 1 Nglegok

The development of context-based English learning materials for Grade 11 automotive students at SMKN 1 Nglegok was guided by a systematic Research and Development (R&D) process based on the theory-guided by [12], which proved crucial in creating relevant and engaging educational resources. By beginning with an in-depth research phase focused on the specific language needs and interests of automotive students, the author was able to tailor the materials to reflect the authentic contexts in which students would utilize English. This emphasis on contextual relevance aligns with constructivist principles of education, which advocate for learning experiences that connect with students' everyday life context [29].

The structured planning phase further ensured that the learning materials encompass essential language skills and content pertinent to the automotive field. Each unit was meticulously designed to address both linguistic competencies and automotive concepts. For example, the unit titled "Welcome to My Workshop" encouraged students to engage in discussions pertinent to their work environments, fostering a practical understanding of vocabulary and expressions relevant to their field. Similarly, units such as "Be Careful" and "Can You Fix My Car?" integrated crucial communication skills needed for safety and customer interactions, thus directly addressing the students' future professional scenarios. Absolutely, those materials encourage students to make connections between their knowledge and its application in life as Rusman (2018) stated about Context-Based Learning.

After finishing the module, the next stage was asking validators to review and give comments on the module product. The validation sheet was made based on Badan Standar Nasional Pendidikan about the criteria of material development which consisted of four aspects (content, language, presentation, and graphics) [30]. Feedback from expert validators played a pivotal role in refining the materials. The high scores and constructive critiques provided insights into the strengths and weaknesses of the content, presentation, language, and graphics used in the learning materials. This iterative process of evaluation and revision is essential in educational material development, as it promotes continuous improvement and adaptation to meet learners' needs effectively [31]. The responsiveness to validator feedback not only enhanced the clarity and usability of the materials but also underscored the importance of collaborative evaluation in the educational design process.

The implementation of the materials in a classroom setting further validated their effectiveness. Observing student engagement during the teaching sessions and subsequently gathering feedback through questionnaires provided quantitative and qualitative data on student satisfaction. The positive reception from students indicates that the context-based approach not only piqued their interest but also facilitated their active participation in learning. This outcome aligns with research suggesting that contextually relevant learning materials can significantly enhance student motivation and retention of language skills.

In comparison to the previous study by Wijayanti & Nugroho, this research has been finished until show the result of user satisfaction while the previous one only looks for the needs of automotive students [32]. Moreover, the research conducted by Kusuma, which also focused on developing an

English module for automotive engineering students, this research introduces several distinct improvements [33]. The last but not the least is the research conducted by Saputri, Widarini, Makrifah, and Mubarok. This research was conducted to develop a local culture reading comprehension book for 8<sup>th</sup> grades students at SMPI Hasanuddin Kesamben Blitar. The product was passed validation stage and it got 90% score of students' satisfaction or categorized into good/valid [34].

However, this module has some different points comparing to the previous studies. First, the module topics have been updated to align with the latest curriculum standards, ensuring relevance to current academic needs. Second, this new module includes a listening section that utilizes QR codes, making it easier for students to access audio materials directly. Third, this module offers more exercises, including group activities, to enhance collaborative learning. In conclusion, these enhancements make the module a more practical and effective resource for automotive engineering students, addressing both individual and group learning needs while integrating modern technology for a more interactive learning experience.

Overall, the findings from this study illustrate the importance of a systematic approach to developing context-based learning materials tailored to specific student demographics. The positive feedback from both expert validators and students indicates that the materials effectively support English language acquisition in a way that is both relevant and engaging. As automotive students prepare to enter a competitive workforce, the integration of English language skills within their technical training is essential for their academic and professional success. This study contributes to the broader field of educational material development by demonstrating how context-based approaches can enhance language learning outcomes and better prepare students for their future careers. Future research may explore the long-term impacts of these materials on students' language proficiency and professional readiness, as well as the potential for similar approaches in other vocational disciplines.

## Explore Teachers' Perspectives on The Development of Context-Based English Learning Materials in The Class 11 Automotive Program at SMKN 1 Nglegok

The exploration of teachers' perspectives on the development of context-based English learning materials for Grade 11 automotive students at SMKN 1 Nglegok yields significant insights into the materials' effectiveness in meeting educational objectives. Overall, the unanimous agreement among teachers that the materials align well with the learning objectives, Standards of Competence (SK), and Basic Competence (KD) for the automotive program underscores the thoughtful design process behind these resources. However, the noted inclusion of SK/KD from Grade 10 suggests an area for improvement. Ensuring that all materials are appropriately aligned with the targeted grade level is essential for maximizing educational impact and maintaining academic integrity [35].

The materials' relevance to students' daily lives emerged as a strong point, with teachers appreciating how the texts explore experiences familiar to automotive students. The use of images reflecting automotive activities serves to bridge the gap between language learning and real-world applications, thereby enhancing student engagement and comprehension [36]. This aligns with the notion that context-based materials promote deeper learning by connecting linguistic skills to practical situations, thus making the learning experience more meaningful [37].

Moreover, the completeness of the materials covering essential language components expressions, tenses, and the four core language skills—demonstrates a comprehensive approach to language education. The incorporation of interactive elements, such as barcodes for additional activities, further enriches the learning experience by fostering engagement and promoting active learning strategies [38]. Teachers' recognition of the up-to-date resources and contemporary content further validates the relevance of the materials, positioning them as effective tools in preparing students for real-world challenges.

While the clarity of the language used in the materials was largely praised, the suggestion for additional guidance to enhance cognitive engagement is noteworthy. This feedback highlights the importance of not only providing clear instructional materials but also ensuring that they challenge students to think critically and apply their knowledge in diverse contexts [33]. As such, integrating tasks that encourage higher-order thinking will be crucial for fostering deeper learning outcomes.

The organizational structure of the materials was viewed as adequate, yet the recommendation for minor adjustments to improve flow, particularly regarding the introduction of narrative elements, emphasizes the need for continuous refinement in educational resources [15]. A well-organized material not only enhances the learning experience but also aids in better retention of information, thus contributing to effective learning outcomes [39].

Teachers reported that the tasks within the materials effectively promote English language interaction, fostering a dynamic classroom environment that encourages independent study. This interactive approach is crucial for language acquisition, as it cultivates an atmosphere where students feel motivated to engage with the language actively Minto (2024). The consistent layout of the materials further contributes to readability and comprehension, which are essential for maintaining student interest and facilitating learning based on Badan Standar Nasional Pendidikan Gedung.

Finally, the professional presentation of illustrations was commended for enhancing students' understanding of the material. The careful choice of fonts and minimal variation in presentation style not only aids clarity but also ensures that students can focus on content without unnecessary distractions. This thoughtful design choice contributes to a positive learning environment where students can effectively engage with the materials.

In summary, the feedback from teachers indicates a positive reception of the context-based English learning materials, highlighting their relevance, completeness, and effectiveness in fostering student engagement and language acquisition within the automotive context. Nonetheless, there remain opportunities for further refinement, particularly in ensuring strict alignment with appropriate grade levels and enhancing cognitive challenges for students. Future iterations of the materials should address these aspects to maximize their effectiveness in promoting English language learning in vocational settings.

### Assess The Level of User Satisfaction with The Context-Based English Learning Materials Developed for Class 11 Automotive Students at SMKN 1 Nglegok

Assessing user satisfaction is crucial for evaluating educational materials, particularly in vocational training contexts where practical relevance is essential Assessing User Satisfaction with a System for E-Learning Based on Dialogue (n.d.). This study aimed to determine the level of satisfaction among Grade 11 automotive students at SMKN 1 Nglegok regarding the Context-Based English Learning materials developed specifically for their needs. The overwhelmingly positive feedback regarding content quality indicates that these materials effectively integrate language learning with industry-specific knowledge. Over 60% of respondents strongly agreed that the material is tailored to meet their English language needs, which aligns with findings by Kusuma, who emphasizes the importance of contextual relevance in vocational education materials [33].

The results for the language aspect, while generally favourable, revealed some mixed feelings among students regarding the complexity of the language used. Although over 50% agreed that the language used in the instructions matched their developmental levels, some students expressed neutrality about their language abilities. This finding suggests a need for further refinement in language complexity to cater to diverse proficiency levels within the cohort [40]. The inclusion of differentiated instructional strategies could help address these concerns, ensuring that materials are accessible to all students regardless of their current language skills [13].

The presentation of the materials was another strength, as students reported high satisfaction with the organization, clarity, and coherence of the content. Many students indicated that the materials encouraged active engagement, supporting the notion that well-structured educational materials enhance learning experiences [33]. However, the presence of neutral and negative feedback concerning student interaction suggests that there is room for improvement. Integrating more interactive elements, such as collaborative projects or hands-on activities, could further enhance student involvement and motivation [18].

The graphic elements of the learning materials received positive feedback, with students appreciating the consistent layout and clear text arrangement. The use of well-placed illustrations was particularly noted for enhancing comprehension, a finding consistent with research highlighting the importance of visual aids in Made Dwi Putri (n.d.). Nevertheless, some students indicated a preference for fewer font variations to simplify the material, suggesting that minor adjustments to the graphic design could enhance overall readability.

In light of these findings, it is recommended to conduct focus groups to gather deeper insights into student experiences, particularly concerning the language aspects of the materials. This qualitative data could inform further refinements to better align the materials with students' needs [39]. Additionally, incorporating multimedia elements, such as videos or simulations relevant to the automotive field, could increase engagement and practical application of the language learned. Overall, while the assessment indicates successful development of educational materials that meet the needs of automotive students, enhancing the language aspects and engagement strategies could lead to even higher levels of satisfaction and improved learning outcomes.

In conclusion, this study demonstrates that context-based English learning materials for automotive students at SMKN 1 Nglegok effectively enhance language acquisition by linking language skills with relevant, real-world applications. Positive feedback from students and teachers confirms the materials' relevance and utility, although suggestions for enhancing language complexity and interactive elements highlight areas for future improvement. Further adjustments to align the materials more closely with student proficiency levels and integrate multimedia resources could increase engagement and practical skill development, providing a more enriching learning experience. This work underscores the value of tailored educational materials in vocational training, setting a foundation for continued advancement in English language education for specialized fields.

### 5. CONCLUSION

In conclusion, this research successfully developed context-based English learning materials specifically for Grade 11 automotive students at SMKN 1 Nglegok, addressing a key gap in vocational English education under the Merdeka Curriculum framework. Through a comprehensive Research and Development (R&D) approach that included needs analysis, expert validation, and iterative testing, five targeted units were created focusing on language skills essential to automotive contexts, such as workshop communication, safety expressions, job applications, and customer interactions. The application of Context-Based Learning (CBL) principles effectively aligned language instruction with students' real-world experiences, enhancing engagement and practical applications of English in automotive settings. Positive feedback from both teachers and students highlighted the materials' relevance, quality, and usability, with students reporting improved job readiness and engagement. Key strengths included the contextual relevance, comprehensive language components, and interactive elements, which enhanced comprehension and engagement. Additionally, the materials' clear structure, engaging format, and effective use of illustrations improved readability and facilitated learning. Nevertheless, areas for further refinement were identified, particularly in language complexity and cognitive engagement, to better serve diverse proficiency levels. Suggestions for improvement included differentiated language support, additional multimedia resources, and more real-world examples to elevate student involvement. Overall, this research demonstrates the value of context-based English learning materials in vocational education, contributing insights for developing resources that align with industry needs and equip students with relevant language competencies.

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