



## Prosiding

Seminar Nasional Inovasi pendidikan dan Pembelajaran  
Fakultas Pendidikan Bahasa dan Seni  
IKIP PGRI Bojonegoro

Tema "Inovasi pendidikan dan Pembelajaran di era digital untuk Pengalaman Belajar  
Imersif"



# The Role of Content Knowledge Integration in Supporting Procedure Text Comprehension through Reading to Learn Strategy: A Qualitative Case Study of Eleventh-Grade TKR Students

Ratman<sup>1</sup>(✉), Ima Isnaini<sup>2</sup>, Fitri Nurdianingsih<sup>3</sup>

<sup>1,2,3</sup>Program Studi Pendidikan Bahasa Inggris, IKIP PGRI Bojonegoro, Indonesia

[ratman.skripsi@gmail.com](mailto:ratman.skripsi@gmail.com)<sup>1</sup>, [isnainiima@ikip PGRI Bojonegoro.ac.id](mailto:isnainiima@ikip PGRI Bojonegoro.ac.id)<sup>2</sup>,

[fitri\\_nurdianingsih@ikip PGRI Bojonegoro.ac.id](mailto:fitri_nurdianingsih@ikip PGRI Bojonegoro.ac.id)<sup>3</sup>

**abstract-** The integration of vocational content into English language learning has become increasingly important in vocational high schools to support students' academic and professional needs. However, many students still experience difficulties in comprehending English texts because learning materials are often disconnected from their vocational background. This study aimed to explore how the integration of content knowledge through the Reading to Learn (R2L) strategy supports students' comprehension of Procedure Text in a vocational high school context. Employing a qualitative case study design, the research involved eleventh-grade students of the Light Vehicle Engineering (TKR) program and an English teacher. Data were collected through semi-structured interviews, classroom observations, and documentation, and analyzed using data reduction, coding, categorization, and thematic analysis. The findings revealed four major themes: positive perceptions toward the R2L strategy, the significant role of content knowledge in facilitating reading comprehension, increased student engagement and learning motivation, and challenges related to technical vocabulary and grammar. The study indicates that integrating vocational content with R2L helps students connect prior practical knowledge with textual information, making reading activities more meaningful and contextual. The findings contribute to the development of vocational English instruction by highlighting the importance of contextualized learning. Future studies are recommended to involve different vocational programs and employ mixed-method approaches to gain broader insights.

**Keywords-** Reading to Learn, Content Knowledge, Reading Comprehension, Procedure Text, Vocational High School

**Abstrak-** Integrasi materi kejuruan dalam pembelajaran Bahasa Inggris menjadi semakin penting di Sekolah Menengah Kejuruan (SMK) karena dapat mendukung kebutuhan akademik dan profesional siswa. Namun, banyak siswa masih mengalami kesulitan memahami teks berbahasa Inggris karena materi yang dipelajari sering kali tidak berkaitan dengan bidang keahlian mereka. Penelitian ini bertujuan untuk mengeksplorasi bagaimana integrasi content knowledge melalui strategi Reading to Learn (R2L) mendukung pemahaman Procedure Text pada siswa kelas XI Teknik Kendaraan Ringan (TKR). Penelitian ini menggunakan desain studi kasus kualitatif dengan melibatkan siswa kelas XI TKR dan seorang guru Bahasa Inggris. Data dikumpulkan melalui wawancara semi-terstruktur,

observasi kelas, dan dokumentasi, kemudian dianalisis melalui reduksi data, coding, kategorisasi, dan analisis tematik. Hasil penelitian menunjukkan empat tema utama, yaitu persepsi positif terhadap strategi R2L, peran content knowledge dalam memfasilitasi pemahaman membaca, peningkatan keterlibatan dan motivasi belajar siswa, serta tantangan yang berkaitan dengan kosakata teknis dan tata bahasa. Temuan ini menunjukkan bahwa integrasi materi kejuruan dengan strategi R2L membantu siswa menghubungkan pengalaman praktik dengan informasi dalam teks sehingga pembelajaran menjadi lebih kontekstual dan bermakna. Penelitian ini berkontribusi terhadap pengembangan pembelajaran Bahasa Inggris vokasional yang berbasis konteks. Penelitian selanjutnya disarankan melibatkan program keahlian yang lebih beragam dan menggunakan pendekatan mixed methods untuk memperoleh pemahaman yang lebih komprehensif.

**Keywords-** Reading to Learn, Content Knowledge, Pemahaman Membaca, Procedure Text, Sekolah Menengah Kejuruan

## INTRODUCTION

English language learning in Vocational High Schools (SMK) has different characteristics from English language learning in general schools because it is oriented toward developing competencies that are relevant to students' fields of expertise. In the Teknik Kendaraan Ringan (TKR) program, students are required not only to understand linguistic aspects but also to be able to access and comprehend technical information, much of which is available in English. One type of text frequently used in vocational contexts is procedure text, which contains operational steps, instructions for using equipment, and vehicle maintenance procedures. The ability to understand procedure texts is important because it is directly related to students' readiness to enter the workforce, which is increasingly connected to global technology and information.

In practice, reading comprehension instruction in vocational schools often still focuses on vocabulary mastery and language structures without deeply connecting them to the vocational knowledge possessed by students. As a result, students experience difficulties in understanding reading materials even when the texts are related to their field of expertise. This condition indicates a gap between English language proficiency and the use of content knowledge or vocational knowledge, which could actually support the text comprehension process. In fact, reading comprehension is a meaning-construction process that involves interaction between information in the text and the knowledge already possessed by the reader (Ghozali & Adi, 2023).

The development of the automotive industry increasingly requires vocational school graduates to possess adequate literacy skills, including the ability to understand technical documents written in English. Vehicle manuals, instructions for using diagnostic equipment, and modern vehicle maintenance procedures are often presented in English. This situation positions reading ability as an essential competency that must be mastered by TKR students. Therefore, English language learning in vocational schools needs to be designed not only to develop linguistic competence but also to integrate vocational content knowledge that is relevant to

students' needs. The integration of content and language learning enables students to connect disciplinary knowledge with language use in meaningful contexts, thereby improving both subject understanding and language development (Coyle et al., 2010).

One approach considered capable of addressing this need is the integration of content knowledge into language learning. This concept emphasizes that language comprehension becomes more effective when the material being studied is related to the knowledge and experiences possessed by students. Research by (Rohmah, 2019) showed that integrating content knowledge and English language competence through the CLIL (Content and Language Integrated Learning) approach can improve students' ability to understand and use language more meaningfully. These findings indicate that language learning connected to specific disciplinary contexts has the potential to improve the quality of learning in vocational settings.

In addition to content knowledge integration, instructional strategies are also important factors in improving students' reading abilities. One strategy that has received considerable attention in literacy instruction is Reading to Learn (R2L). This strategy emphasizes providing systematic support to students in understanding text structures, identifying important information, and gradually constructing comprehension. According to (Rose & Martin, 2012), the R2L strategy provides structured scaffolding that enables learners to engage with texts more effectively while connecting new information with their existing knowledge. Through guided reading activities, students are supported in developing deeper comprehension and greater independence in interpreting texts.

Various previous studies have examined reading instruction among vocational school students. (Firahmahira et al., 2024) investigated the use of the DRTA strategy in teaching procedure texts and found improvements in students' reading comprehension abilities. Meanwhile, (Khafidhoh et al., 2023) demonstrated that the SQ3R strategy was effective in improving vocational students' reading achievement. Another study by (Lukmana, 2023) proved that the Cooperative Integrated Reading and Composition approach contributed to improving students' reading abilities. However, most of these studies focused more on the effectiveness of reading strategies and have not specifically explored how the integration of vocational content knowledge can support students' comprehension of the texts they study.

On the other hand, research on the integration of vocational content into English language learning has been widely discussed through the perspectives of Content and Language Integrated Learning (CLIL) and Content-Based Instruction (CBI). (Coyle et al., 2010) argued that integrating subject content and language learning provides meaningful learning experiences because students develop language skills while engaging with disciplinary knowledge. Similarly, (Dalton-Puffer, 2011) reported that content-integrated instruction can enhance learners' motivation, participation, and academic engagement because language is learned within authentic subject contexts. However, previous studies have generally focused on the implementation of CLIL or content-based approaches in broad educational settings and have not specifically explored how content knowledge integration supports reading comprehension through the Reading to Learn strategy among vocational students in the Automotive Engineering (TKR) program.

Based on the discussion above, there is a research gap regarding the understanding of the process of integrating content knowledge into English language learning through the Reading to Learn strategy in the context of vocational education. Therefore, this study aims to explore how content knowledge integration is implemented in teaching procedure texts through the Reading to Learn strategy among vocational school students majoring in Teknik Kendaraan Ringan (TKR). The findings of this study are expected to contribute theoretically to the development of content-based language learning studies in vocational education and provide practical benefits for teachers in designing English language instruction that is more contextual, meaningful, and aligned with workplace demands.

## RESEARCH METHOD

This study employed a qualitative approach with a case study design to explore the integration of content knowledge through the Reading to Learn (R2L) strategy in teaching Procedure Text to eleventh-grade students of Teknik Kendaraan Ringan at SMK N DANDER at vocational high school. This approach was chosen to obtain an in-depth understanding of the experiences, perceptions, and learning processes that occurred within the natural classroom context.

The research participants consisted of seven eleventh-grade TKR students selected purposively based on their involvement in the learning process, along with one English teacher who served as a supporting informant. The research data were collected through semi-structured interviews, classroom observations, and documentation. Interviews were conducted to explore the experiences and perceptions of both students and the teacher regarding the implementation of the R2L strategy and the integration of content knowledge in learning. Observations were carried out to examine student engagement, classroom interactions, and the implementation of the R2L strategy during instruction, while documentation was used to complement and confirm the data obtained from interviews and observations.

The primary research instrument was the researcher, supported by interview guidelines and observation sheets. Data were analyzed thematically through several stages, namely data reduction, coding, categorization, and theme identification. The transcribed data were analyzed to identify patterns related to the focus of the study. The analysis process generated four main themes: students' perceptions of the Reading to Learn strategy, the role of content knowledge in understanding Procedure Text, student engagement and learning motivation, and the challenges encountered during the learning process.

The trustworthiness of the data was maintained through source and technique triangulation. Source triangulation was conducted by comparing data obtained from students and the teacher, while technique triangulation was carried out by comparing the results of interviews, observations, and documentation. These steps were taken to enhance the credibility and consistency of the research findings.

## HASIL DAN PEMBAHASAN

### Research Findings

Data analysis was conducted through the stages of data reduction, coding, categorization, and theme identification based on the results of in-depth interviews with students and the teacher, as well as classroom observations. From this process, four main themes were identified that explain the implementation of Reading to Learn (R2L) integrated with content knowledge in teaching Procedure Text to eleventh-grade TKR students: (1) positive perceptions of the R2L strategy, (2) the role of content knowledge in text comprehension, (3) increased engagement and learning motivation, and (4) learning challenges.

#### 1. Positive Perceptions of the Reading to Learn Strategy

The interview results showed that most students perceived the R2L strategy as helping them understand texts more systematically compared to the reading instruction they usually experienced. Students felt supported because the teacher provided step-by-step explanations before they completed tasks independently.

One student stated:

“The teacher explained the content of the text step by step, so it was easier for me to understand the reading passage.”

The observation results also showed that students were more focused during the learning process and more active in discussion activities. The teacher revealed that the stages of R2L were suitable for vocational school students because they provided clear support in understanding texts.

#### 2. The Role of Content Knowledge in Understanding Procedure Text

The most dominant theme in this study was the importance of content knowledge in supporting students' reading comprehension. Almost all students stated that the automotive topics used in the texts made it easier for them to understand the content because the topics were directly related to their workshop practice experiences.

One student stated:

“I have practiced it before, so it is easier for me to understand the steps presented in the text.”

Observations showed that students frequently connected the content of the texts with their practical experiences. This was evident when students were able to explain procedures for changing engine oil or checking a battery based on their workshop experiences.

#### 3. Increased Engagement and Learning Motivation

The integration of TKR-related materials into English language learning also contributed to increased student engagement. Most students reported being more active in discussions and more motivated to participate in learning because the materials were relevant to their field of specialization.

One student stated:

“I am more enthusiastic because the material is related to my major.”

Observation findings indicated that students participated more frequently in group discussions, asked questions, and responded to the materials being discussed.

The teacher also confirmed that students demonstrated higher enthusiasm compared to when general texts were used.

#### 4. Challenges in Learning

Although the implementation had positive impacts, this study found that technical English vocabulary remained the main obstacle for some students. In addition, several students still experienced difficulties in understanding sentence structures and grammar.

One student expressed:

“I know the equipment, but I do not know its English term yet.”

The teacher also observed that some students still translated texts word by word while reading. Therefore, support in the form of vocabulary reinforcement and the use of visual media is still needed in the learning process.

Table 1. Summary of Research Findings

Theme	Main Findings
Perceptions of R2L	Learning is more structured and easier to understand
Role of Content Knowledge	Helps students understand text content through practical experience
Engagement and Motivation	Increased because the materials are relevant to the students' major
Learning Challenges	Technical vocabulary and grammar remain obstacles

## Discussion

The findings of this study indicate that the Reading to Learn strategy provides a more structured learning experience for vocational school students. Students not only read texts independently but also receive gradual support through teacher explanations, discussions, and text construction activities. This finding is consistent with the concept of Reading to Learn proposed by (Rose & Martin, 2012), which states that reading comprehension can be improved through systematic scaffolding. In the context of this study, teacher support helped students understand texts before completing tasks independently.

The most prominent finding was the role of content knowledge in supporting the comprehension of Procedure Text. The practical experiences possessed by TKR students functioned as prior knowledge, enabling them to connect new information in the texts with experiences they had previously acquired. This finding supports Schema Theory, which explains that reading comprehension occurs when readers connect new information with knowledge structures already stored in memory (Anderson, 2013). Therefore, integrating automotive materials into English language learning enables students to understand text content in a more contextual and meaningful way.

The findings of this study also reinforce the results of (Rohmah, 2019), who argued that the integration of content knowledge and language competence contributes to more meaningful language learning experiences. Furthermore, these findings are consistent with the principles of Content and Language Integrated Learning (CLIL), which emphasize the simultaneous development of subject knowledge and language skills within authentic learning contexts (Coyle et al., 2010). In the present study, students demonstrated better comprehension when the reading materials were directly connected to their automotive experiences, indicating that content familiarity facilitated meaning-making during reading activities. This finding also supports (Dalton-Puffer, 2011), who suggested that content-integrated instruction enhances learners' engagement and participation because language is learned through relevant and purposeful subject matter. Therefore, the present study extends previous research by showing that the integration of content knowledge through the Reading to Learn strategy not only supports reading comprehension but also promotes greater classroom engagement among vocational students.

Nevertheless, this study also revealed that mastery of technical vocabulary remains a major challenge. This condition indicates that the integration of content knowledge alone is not sufficient to overcome all reading difficulties. Language proficiency remains an essential component that must be continuously developed through vocabulary reinforcement, the use of visual media, and the provision of adequate scaffolding. This finding suggests that the success of vocational English language learning depends on a balance between vocational content mastery and linguistic competence.

Overall, this study demonstrates that the implementation of Reading to Learn integrated with content knowledge makes a positive contribution to students' comprehension of Procedure Text, learning engagement, and motivation among TKR students. Learning that connects language with vocational contexts has proven capable of creating a more meaningful learning experience that is aligned with the characteristics of vocational education.

## CONCLUSION

This study aimed to explore how the integration of content knowledge through the Reading to Learn (R2L) strategy supports the teaching of Procedure Text to eleventh-grade students of Teknik Kendaraan Ringan (TKR) in a vocational high school. Based on the results of data analysis obtained through in-depth interviews, observations, and documentation, it was found that the implementation of the Reading to Learn strategy integrated with content knowledge made a positive contribution to the reading learning process. Students demonstrated positive perceptions of the learning process because the R2L strategy provided systematic support in understanding texts, starting from contextual introduction to in-depth comprehension of the reading material. In addition, the use of topics relevant to the students' field of expertise, such as vehicle maintenance and repair, helped students

connect their existing vocational knowledge with the new information presented in the texts.

The findings also revealed that content knowledge functions as prior knowledge that facilitates students' comprehension of Procedure Text. The practical experience possessed by the students enabled them to understand the purposes, procedures, and content of the texts more easily than when studying texts unrelated to their vocational field. The integration of automotive contexts into English language learning not only supported reading comprehension but also increased student engagement and learning motivation. Students became more active in discussions, more confident in expressing their opinions, and demonstrated greater interest in learning because the materials were considered relevant to their academic needs and vocational competencies.

From a theoretical perspective, this study reinforces Schema Theory, which explains that reading comprehension is influenced by readers' ability to connect new information with previously acquired knowledge. This study also supports the principles of Content-Based Instruction (CBI) and the Reading to Learn theory, both of which emphasize the importance of integrating content and language in the learning process. From a practical perspective, the findings imply that English teachers in vocational schools need to develop learning materials that are relevant to students' vocational competencies so that learning becomes more contextual, meaningful, and aligned with the characteristics of vocational education.

Nevertheless, this study has several limitations. The study was conducted in only one class and one specialization program, namely eleventh-grade TKR students, so the findings cannot yet be generalized to all vocational education contexts. In addition, the limited number of participants and the use of a case study approach resulted in findings that focus more on an in-depth understanding of a particular phenomenon rather than on generalization. Another limitation is that the study did not specifically examine on particular language aspects, such as technical vocabulary mastery or reading inference skills.

Based on these limitations, future studies are recommended to involve more vocational programs and different schools in order to obtain a more comprehensive understanding of the implementation of content knowledge integration in vocational English language learning. Future research may also investigate the effectiveness of the Reading to Learn strategy with other text types, such as report text, explanation text, or workplace documents, which are relevant to workplace needs. Therefore, the development of vocational-context-based English language learning can continue to be improved in order to support students' readiness to meet the demands of education and the workplace.

**REFERENSI**

- Anderson, R. C. (2018). Role of the reader's schema in comprehension, learning, and memory. In *Theoretical models and processes of literacy* (pp. 136-145). Routledge.
- Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning*. Cambridge University Press.
- Dalton-Puffer, C. (2011). Content-and-language integrated learning: From practice to principles? *Annual Review of Applied Linguistics*, 31, 182–204.
- Firahmahira, P., Al-Baekani, A., & Utami, P. P. (2024). The implementation of directed reading thinking activity (DRTA) strategy in teaching reading comprehension using procedure text at vocational high school students. *Jurnal Ilmiah Wahana Pendidikan*, 10(4), 645–654. <https://doi.org/10.5281/zenodo.10530759>
- Ghozali, M. A. F., & Adi, W. (2023). Teaching Reading Strategies Implemented on Student's Reading Comprehension at a Vocational High School. *EDUCAFL: Journal on Education of English as a Foreign Language*. <https://doi.org/10.21776/ub.educafl.2023.006.01.01>
- Khafidhoh, D. L., Tasnim, Z., & Sukmaantara, I. P. (2023). The use of SQ3R strategy to improve reading comprehension achievement of vocational high school students. *EFL Education Journal*, 10(3). <https://doi.org/10.19184/eej.v10i3.40970>
- Lukmana, A. P. (2023). The effectiveness of cooperative integrated reading and composition on vocational high school students' reading comprehension. *RETAIN: Journal of Research in English Language Teaching*, 11(2), 23–29.
- Rohmah, I. I. T. (2019). The feasibility and effectiveness of integrating content knowledge and English competences for assessing English proficiency in CLIL. *ETERNAL (English Teaching Journal)*, 10(1).
- Rose, D., & Martin, J. R. (2012). *Learning to write, reading to learn: Genre, knowledge and pedagogy in the Sydney School*. Equinox.