Journal of English Language and Education
ISSN 2597- 6850 (Online), 2502-4132 (Print)
Journal Homepage: https://jele.or.id/index.php/jele/index

OPEN ACCESS Article

Implementing English for Specific Purposes (ESP) in a Multi-Major Vocational Context: A Qualitative Case Study of Software Engineering and Electrical Installation Programs

https://doi.org/10.31004/jele.v11i2.2216

*Jihan Hanapiah, Setia Muljanto, Pipih Setiawati[abc]
[123]English Education Program, Institut Pendidikan Indonesia Garut, Indonesia
Corresponding Author: jihanhanapiah14@gmail.com

A B S T R A C T

English for Specific Purposes (ESP), defined by Hutchinson and Waters (1987) as a goal oriented approach that tailors language instruction to learners' specific professional needs, occupies a central place in vocational education in Indonesia. Current policies such as the Merdeka Curriculum and Ministerial Decree No. 244/M/2024 emphasize that English instruction in vocational high schools must prepare students for the linguistic demands of their respective fields rather than for general communication alone. However, existing studies primarily investigate ESP within a single vocational major and focus on needs analysis or material development, leaving limited understanding of how teachers implement ESP simultaneously across different departments with distinct technical discourses under one curriculum framework. This study aims to examine how ESP materials are implemented in two majors, Software Engineering (RPL) and Electrical Installation Engineering (TITL), at SMK Teknologi Mandiri in Garut, West Java. A qualitative descriptive design was employed through four classroom observations and semi structured interviews with two experienced English teachers. The findings reveal four consistent implementation strategies: technical vocabulary introduction, genre contextualization of national curriculum text types, authentic material use, and vocational task simulation. The study also identifies three major challenges, namely limited instructional time, demands on teachers' technical knowledge, and varied student proficiency levels. The findings suggest that effective ESP implementation in a multi major vocational context depends on interdisciplinary collaboration and adaptive material development to align curriculum requirements with workplace communication needs, thereby strengthening students' readiness for Field Work Practice.

Keywords: *English for Specific Purposes, Vocational High School, Multi Major Implementation, Qualitative Study, Vocational Readiness*

Article History:
Received 21st February 2026
Accepted 22nd March 2026
Published 23rd March 2026

INTRODUCTION

English has long been seen as a gateway to professional opportunity, but in vocational education that recognition must translate into something more concrete: language instruction that students can actually use in the field. In Indonesia, the push toward this direction has grown stronger with the Merdeka Curriculum and Ministerial Decree No. 244/M/2024, which grants vocational schools (SMK) greater flexibility in designing program concentrations that better respond to workplace demands. Within this policy context, English instruction at SMK is expected to go beyond general communicative competence and actively support students in their vocational disciplines.

This expectation has created growing interest in English for Specific Purposes (ESP) as a pedagogical approach for vocational settings. As (Fadlia et al., 2020) and (Agustina, 2014) have noted, ESP is better suited to vocational learners because it focuses on the language functions, vocabulary, and tasks directly relevant to students' chosen fields. At SMK Teknologi Mandiri in Kadungora, Garut, students in Software Engineering (RPL) need to read and produce technical documentation, understand programming terminology, and communicate system logic while students in Electrical Installation Engineering (TITL) need to interpret

safety protocols, understand electrical component manuals, and describe installation procedures. These are fundamentally different language needs, even though both groups fall under the same vocational English umbrella.

What makes this situation particularly interesting and underexamined is that most existing ESP studies in vocational contexts focus on a single major. Studies by (Ni'mah, 2024), (Asrifaningtyas & Pratiwi, 2024), and (Mauludin et al., 2021) each looked at one discipline at a time, whether culinary arts, accounting, or engineering. In doing so, they leave open a practical question that many teachers face daily: how do you implement ESP when you are responsible for two or more majors with very different technical vocabularies, text types, and professional communication demands?

This study takes that question as its starting point. By examining how two English teachers at SMK Teknologi Mandiri adapted their instruction for both RPL and TITL students, the research aims to document not just what they did in the classroom, but how they thought about the challenge of serving multiple majors within the same school. The guiding research question is: How is ESP material implemented in two different majors at a vocational high school? This question attends to four dimensions how teachers plan ESP instruction, how they implement it in the classroom, how they adapt materials to department-specific needs, and what challenges they face along the way.

Literature Review

English for Specific Purposes (ESP): Definition and Characteristics

At its core, ESP is a goal-oriented approach to language instruction shaped by what learners need to do with English in their professional or academic lives. (Hutchinson & Waters, 1987), whose foundational work continues to inform most ESP scholarship, define ESP not as a distinct form of English but as an approach a way of making decisions about content and method governed by the learner's specific purposes rather than by a predetermined linguistic syllabus. (Dudley-Evans & St. John, 1998) extend this by identifying both absolute and variable characteristics: ESP always meets specific learner needs and uses the methodology and activities of the target discipline, while variably being tied to specific discourse types, designed for adult learners, and tailored to particular professional contexts.

In the Indonesian vocational school context, ESP falls under what Hutchinson and Waters (1987) classify as English for Science and Technology (EST). Both TITL and RPL majors require students to engage with technical texts, workplace documentation, and discipline-specific vocabulary unlikely to appear in a General English textbook. The challenge, as (Mohamed & Alani, 2022) point out, is that ESP demands that teachers understand their students' disciplines well enough to make meaningful material choices already demanding when teaching one major, and considerably more complex when teaching two simultaneously.

General English versus ESP in Vocational Education

One of the most persistent issues in vocational English education is the gap between what General English (GE) curricula offer and what vocational students actually need. (Juliana & Juliani, 2020) describe this as a misalignment: GE focuses on broad communicative competence and standardized grammatical forms, while vocational learners require the precision and specificity that comes with domain knowledge. For TITL students, this unpreparedness shows up practically struggling to read international electrical equipment manuals, follow K3 safety protocols in English, or describe an installation procedure. For RPL students, the gap is equally tangible: they encounter English every time they open a programming environment, access API documentation, or troubleshoot an error message.

Asrifaningtyas & Pratiwi, (2024) found, through a systematic literature review, that the absence of relevant ESP materials in Indonesian vocational schools is a key contributor to low English proficiency. Their findings suggest the solution is not simply more English instruction, but more targeted instructionone that connects language learning to the specific texts, tasks, and terminology students will encounter in their careers. This is precisely the argument for ESP, and one that policy increasingly supports, even as classroom implementation continues to vary widely from school to school.

Teacher Agency and the Challenge of Multi-Major ESP

Much of what makes ESP work in practice comes down to the teacher. Unlike other subjects where the textbook largely determines the lesson, ESP teachers in vocational settings are frequently required to function as material developers selecting, transforming, and supplementing existing resources to match the language demands of their students' disciplines. (Srisudarso & Nugraha, 2024) have documented how teacher-mediated adaptation can meaningfully improve students' English skills, while (Akintunde & Adeyiga, 2022) identify needs analysis as the foundational step in any ESP material development.

However, formal needs analysis assumes time and resources that many vocational school teachers do not have. At most Indonesian SMK, English teachers carry large class loads, may be responsible for students in three or four different majors, and are working with general English textbooks not designed for vocational purposes. Most studies (Ni'mah, 2024), (Risanti et al., 2025), (Yuanti & Vardhani, 2021) examine one discipline at a time, leaving unaddressed the practical reality of teachers who must serve multiple majors simultaneously. This gap forms the central motivation for the present study.

METHOD

This study employs a qualitative descriptive research design. The qualitative approach was chosen because the research goal is interpretive rather than predictive: the aim is to understand, from the teachers' own perspectives and as observed in their classrooms, how ESP is implemented in practice not to test whether a particular intervention produces measurable outcomes. As (Creswell & Creswell, 2022) explain, qualitative methods are particularly suited to exploring the meanings that people attach to their professional experiences within natural settings, making them appropriate when the researcher is interested in process and context rather than variables and measurements. A descriptive design, specifically, was selected because the study does not manipulate conditions or compare groups; instead, it describes an existing phenomenon ESP implementation as it occurs naturally across two different vocational departments at a single school.

This design differs from a case study in a key respect: rather than producing a holistic account of a bounded case (such as one teacher's practice), the study uses multiple data sources to describe and analyze patterns of implementation across two departments, with the goal of identifying strategies, challenges, and contextual factors that other vocational English teachers might recognize and apply. The qualitative descriptive approach has been used in comparable ESP research in Indonesian vocational contexts (Asrifaningtyas & Pratiwi, 2024) (Sarwanti et al., 2023) and is well suited to the present study's purpose of generating practical, grounded insight rather than formal theoretical claims.

Research Setting and Participants

The research was conducted at SMK Teknologi Mandiri, a vocational high school in Garut, West Java, which offers engineering programs including Software Engineering (RPL) and Electrical Installation Engineering (TITL). These two departments were selected because they represent contrasting types of technical English use one digital and logic-oriented, the other physical and procedure-oriented making the comparison between them both theoretically productive and practically relevant. Two English teachers participated in this study, selected through purposive sampling on the basis of their direct involvement in teaching English to students in both RPL and TITL. Both participants referred to as Teacher SR and Teacher DS to protect their privacy had 13 years of teaching experience at the school. Their long experience with the vocational context, combined with their active role in adapting materials for different departments, made them well-positioned to speak to the study's research questions.

Instruments

Data were gathered through two instruments: a structured observation checklist and a semi-structured interview guide. The observation checklist was organized around four ESP implementation indicators derived from the ESP literature technical vocabulary introduction,

text transformation (genre-contextualization), authentic material use, and vocational task production. The interview guide consisted of 19 open-ended questions covering teachers' understanding of ESP, their material planning and adaptation processes, their collaboration with vocational subject teachers, and the challenges they encountered across both departments. Both instruments were validated through expert judgment by a specialist in Instructional Design, yielding a feasibility score of 66% (Feasible), after which minor revisions were made for clarity.

Procedures

Classroom observations were conducted across four sessions: two in TITL classes (Grades X and XI, January 19 to February 3, 2026) and two in RPL classes (Grades X and XI, November 19 to 26, 2025). The researcher used non-participant observation throughout, documenting how teachers introduced vocabulary, adapted texts, used authentic materials, and assigned vocational tasks, with comprehensive field notes taken at each session. Semi-structured interviews were conducted with both teachers in February 2026, following the observation period. Each session lasted 30 to 45 minutes and was recorded with participants' consent. The semi-structured format was deliberately chosen to allow teachers to elaborate on their experiences beyond the scope of predetermined questions.

Data Analysis

Data were analyzed using the six-step thematic analysis framework of Braun and Clarke (2006): (1) familiarizing with data through repeated reading; (2) generating initial codes; (3) grouping codes into broader patterns; (4) reviewing patterns against the full dataset; (5) defining and naming final themes; and (6) producing an integrated narrative account. Trustworthiness was ensured through triangulation (comparing observation data, interview statements, and lesson plan documents), member checking (returning interpretations to both teachers for verification), and transparent documentation of coding decisions throughout the analysis.

FINDINGS AND DISCUSSION

Classroom Observation: Four-Stage Implementation Pattern

Across all four observed sessions two in TITL (Grades X and XI) and two in RPL (Grades X and XI) a consistent pattern of ESP implementation emerged, organized around four recurring stages. These stages were not explicitly labeled by the teachers, but appeared with enough regularity across both departments to constitute a de facto instructional framework.

In the opening stage of every observed class, teachers established the vocational stakes of the lesson before introducing any technical content. In the RPL Grade X session, the teacher spent several minutes explaining that every major programming language is documented in English and that students' ability to read and write technical descriptions would directly affect their effectiveness as software developers. In the TITL session, the teacher opened a roleplay activity by situating it within a realistic workplace scenario: communicating about an electrical circuit fault with a supervisor.

Technical vocabulary and genre-contextualization formed the core of each lesson. In RPL classes, terms such as syntax, debug, compile, designed, developed, and fixed were introduced not as decontextualized word lists but embedded in the sentence structures and text types relevant to software development. In TITL, terms including voltage, circuit breaker (MCB), fuse, and wire appeared in similarly contextualized ways, frequently linked to physical materials students already handled in their vocational practice classes.

Text transformation was applied consistently across both departments. In the RPL Grade X class, a standard Recount text from the national curriculum textbook was rewritten as a narrative about a student's experience debugging a program. In TITL Grade X, a Procedure text was adapted to describe the steps for a safe electrical inspection. This genre-contextualization strategy preserving the curriculum's required text types while replacing general content with vocational content was the primary method through which teachers bridged the gap between the textbook's scope and their students' professional needs.

Authentic materials were used when time permitted. In the RPL Grade X session, the teacher used actual program source code as a reading text, directing students to describe each section's function in plain English. In TITL, an installation board students had constructed in their vocational class served as the object of a descriptive writing exercise. The production stage vocational task simulation was reached in three of four sessions. In the TITL Grade X class, it could not be completed because the class ran out of time after 60 rather than the allocated 90 minutes. Table 1 below summarizes the four implementation indicators across all observed sessions.

Table 1. Summary of ESP Implementation Indicators Across Observed Classes

ESP Indicator	TITL Gr. X	TITL Gr. XI	RPL Gr. X	RPL Gr. XI
Technical Vocabulary Introduction	✓	✓	✓	✓
Text Transformation (Genre-Contextualization)	✓	✓	✓	✓
Authentic Material Use	✓	✓	✓	Partial
Vocational Task Simulation	–	✓	✓	✓

Interview Findings: Three Recurring Challenges

Time Constraints and the Limits of 90 Minutes

Both teachers identified time as their most pressing constraint. Teacher SR described the asymmetry between what effective ESP instruction demands and what the lesson period allows:

> *"It does have an impact, especially if we use media such as video and audio, which require more time to prepare. It takes about two and a half hours that includes time to prepare the equipment, get the students ready, and prepare the material. Moreover, we don't go straight to the material we want to explain. We have to give feedback and hold a question-and-answer session. Ninety minutes is sufficient for the TITL class with only 17 students. However, in classes with more than 17 students, one 90-minute session will definitely be insufficient. (SR, February 12, 2026)"*

This observation captures a structural problem: the production stage where students actually use English for vocational purposes is both the most pedagogically valuable and the most vulnerable to being cut. In the TITL Grade X observation, this is exactly what happened.

Technical Vocabulary and the Demands on Teacher Knowledge

A second challenge is the demand ESP places on teachers' own subject knowledge. Teacher SR noted that the meaning of English terms can shift dramatically across vocational contexts: the word 'liquid,' for instance, refers to brake fluid in automotive engineering, not simply to any fluid substance. For an English teacher without engineering training, this kind of semantic precision requires deliberate preparation.

Teacher DS, by contrast, had turned this challenge into a professional development opportunity. He routinely consulted RPL productive teachers before designing each unit to find out which programming concepts students were currently working on, and coordinated with TITL teachers about safety protocols being emphasized in the semester's practicum sessions. This allowed him to build vocabulary lists and text examples grounded in what students were actually encountering in their technical classes.

Varied Student Proficiency

The third challenge was the wide range of English proficiency levels within each class. Students with self-directed exposure to English through gaming, YouTube, or programming communities often arrived already familiar with technical vocabulary in their field, while others lacked both general and technical English foundations. Teacher DS noted that students with stronger language foundations could quickly grasp technical sentence structures, while those with weaker foundations required extensive visual scaffolding: having English terms

matched to physical objects in the room, or lines of code annotated in Bahasa Indonesia before being discussed in English.

Interview Findings: Two Core Strategies

Genre-Contextualization

The most consistent strategy across both teachers and both departments was genre-contextualization: taking the text types required by the national curriculum (Recount, Descriptive, Procedure, Roleplay) and filling them with department-specific vocabulary, scenarios, and professional tasks. Teacher DS described the approach as 'marrying' curriculum standards with real industry needs:

> *"I first study what the curriculum or the Capaian Pembelajaran (CP) requires, then I try to 'marry' those curriculum standards with the real needs in the field. My strategy is to choose topics that have a high impact on students, so that time constraints do not hinder their mastery of technical skills. (DS, February 13, 2026)"*

In practice, this meant that the same curriculum unit for example, Recount text at Grade X level produced entirely different lesson content depending on the department: a narrative about debugging a program for RPL students, and a narrative about completing an electrical installation project for TITL students.

Interdisciplinary Collaboration

The success of genre-contextualization depended on teachers knowing enough about their students' vocational disciplines to fill curriculum texts with accurate, relevant content. Both teachers addressed this through systematic informal collaboration with subject matter colleagues. Teacher DS described consulting RPL productive teachers before each unit, asking which programming languages students were currently using and which English terms appeared most frequently in their technical materials. Teacher SR aligned her TITL materials with the department's current practicum schedule, so that students encountered the same technical concepts in English that they were simultaneously encountering in Indonesian in their specialist classes.

Impact on Student Engagement and PKL Readiness

Both teachers observed that ESP-oriented instruction produced qualitatively different student engagement from general English lessons. Teacher DS described a direct, practical impact:

> *"With early exposure to technical terms, TITL students no longer feel confused when reading international electrical component manuals, and RPL students are already accustomed to API documentation or error handling in English. This makes them more confident when undertaking Field Work Practice (PKL) because language barriers in technical instructions have been minimized. (DS, February 13, 2026)"*

Teacher SR observed a parallel shift in motivation:

> *"Students are much more enthusiastic and excited to learn because they feel, 'Oh, this term means this.' They often already know the meaning of the words independently, so my job is more to guide them in composing descriptions or sentences so that they are synchronized and coherent. (SR, February 12, 2026)"*

Discussion

The findings reveal an approach to ESP that is pragmatic rather than theoretically prescribed: shaped by genuine institutional constraints, sustained by teacher creativity, and effective in ways that directly serve students' professional preparation rather than their scores on standardized language assessments.

The genre-contextualization strategy that both teachers employed represents a practical resolution to a tension that the existing ESP literature acknowledges but seldom addresses directly: the tension between the theoretical ideal of purpose-built ESP materials and the practical reality of teachers working with general curriculum textbooks, limited time, and limited technical expertise. (Hutchinson & Waters, 1987) describe ESP as an approach

rather than a product, and the teachers' work at SMK Teknologi Mandiri illustrates what this means in practice. Rather than replacing the curriculum, they worked within it using the curriculum's own text type requirements as the structural frame and substituting vocational content as the substance. This is consistent with what (Srisudarso & Nugraha, 2024) found in their study of ESP-oriented teaching in Indonesian secondary schools: that teacher-mediated material adaptation is the primary driver of improved vocational English outcomes, not access to specialized resources.

The interdisciplinary collaboration described by both teachers adds an institutional dimension to this finding. When Teacher DS consulted RPL productive teachers to identify current programming units, or when Teacher SR aligned her TITL lessons with the semester's practicum schedule, they were constructing something beyond a lesson plan: a shared curricular understanding between language and vocational subject teachers. This kind of cross-departmental coordination is rarely formalized in Indonesian SMK policy, yet the findings suggest it is essential to ESP implementation that is both technically accurate and pedagogically relevant. (Akintunde & Adeyiga, 2022) argue that needs analysis is the foundation of effective ESP; what these teachers were doing informally checking with colleagues about current technical content constitutes a practical, embedded form of ongoing needs analysis within institutional constraints that would not permit formal needs analysis procedures.

The challenge of limited instructional time deserves particular attention. The 90-minute lesson period was consistently sufficient for the first three stages of the observed instructional sequence (vocabulary introduction, text transformation, authentic material exposure) but not for the fourth (vocational task simulation). Since simulation is the stage at which students actually use English for vocational purposes the stage, that is, which most directly realizes the functional goal of ESP its systematic abbreviation represents a structural limitation on what ESP can achieve within the existing institutional framework. This finding aligns with what (Albattah et al., 2022) identify as the 'variable' characteristic of ESP: the flexibility to adapt to different settings also means that implementation can fall short of the theoretical ideal when contextual constraints are severe enough. Addressing this would require not changes in teacher strategy but changes in institutional scheduling or time allocation.

Finally, the impact data teachers' accounts of students who arrive at Field Work Practice already familiar with API documentation or electrical manuals points toward a criterion of success that the broader ESP literature tends to undervalue. Most studies measure ESP outcomes through language proficiency gains, vocabulary acquisition rates, or writing quality scores. The outcome that matters most to these students, and to their future employers, is practical confidence in using English as a professional tool. Documenting and theorizing this kind of functional readiness, rather than proximate linguistic measures, may be one of the more important directions for future ESP research in vocational contexts.

CONCLUSIONS

Taken together, the evidence from this study points to a model of ESP implementation that may be described as "constrained adaptation," in which teachers, despite limited access to specialized ESP materials and the absence of formal needs analysis, are still able to achieve meaningful vocational language outcomes by strategically aligning national curriculum requirements with industry-specific demands. The effectiveness of this model depends not only on individual teacher initiative but also on their familiarity with students' vocational disciplines and the presence of institutional conditions that allow—even informally—for collaboration between English and vocational subject teachers. Theoretically, these findings reinforce the idea proposed by Hutchinson and Waters (1987) that ESP is an approach rather than a product, demonstrating that ESP can function effectively even without dedicated textbooks or curriculum structures, as long as teachers understand the communicative

demands of the target disciplines and are supported in translating that understanding into instructional practice. This shifts the focus for policymakers and school leaders from merely providing ESP materials to creating enabling conditions, such as structured collaboration time, relevant professional development, and assessment systems that value vocational language readiness alongside general English proficiency. However, the study is limited by its small scope, relying on two teachers and four observation sessions within a single school, thus offering analytical insight rather than broad generalizability; moreover, the absence of student perspectives means that reported impacts on motivation and readiness for Field Work Practice remain unverified. Future research should therefore incorporate student voices, extend observation periods, and replicate the study across diverse institutional contexts, with longitudinal designs that trace students' progression from ESP instruction to workplace application to better assess the long-term impact of vocational language preparation.

ACKNOWLEDGEMENTS

The author wishes to thank Teacher SR and Teacher DS for their openness and willingness to participate in this study, and the leadership of SMK Teknologi Mandiri for granting access to their classrooms. Sincere gratitude is also due to the supervisors and colleagues at the English Education Program, Institut Pendidikan Indonesia Garut, for their guidance and support throughout the research process.

REFERENCES

Agustina, T. (2014). English for specific purposes (ESP): An approach of English teaching for non-English department students. Beta: Jurnal Tadris Matematika, 7(1), 37–63.

Akintunde, A. F., & Adeyiga, A. A. (2022). Needs analysis in English for Specific Purposes. JHSPR: Journal of Human, Social & Political Science Research, 26(4), 13–26.

Alhomidan, A. M. A. (2025). Integrating English for specific purposes in technical and vocational education: A sustainable model for industry-education alignment. International Journal of Social Science and Humanities Research, 13(2), 201–218.

Asrifaningtyas, M., & Pratiwi, R. A. K. (2024). Tinjauan pustaka sistematis: Analisis kebutuhan English for specific purposes untuk siswa SMK. Jurnal Pendidikan Profesional, 13(2), 111–119.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101.

Creswell, J. W., & Creswell, J. D. (2022). Research design: Qualitative, quantitative, and mixed methods approaches (6th ed.). Sage Publications.

Dudley-Evans, T., & St. John, M. J. (1998). Developments in English for specific purposes: A multidisciplinary approach. Cambridge University Press.

Efendi, M. Y., Mayasari, E., Iswanto, J., & Apriyani, L. (2025). Needs analysis of English for Specific Purpose at engineering students in vocational high school. IALLTEACH (Issues in Applied Linguistics & Language Teaching), 7(1), 248–256.

Fadlia, F., Zulida, E., Asra, S., Rahmiati, R., & Bania, A. S. (2020). English subject on English for specific purposes (ESP) in vocational schools. Language Literacy: Journal of Linguistics, Literature, and Language Teaching, 4(2), 358–367.

Fitria, T. N. (2020). Teaching English for specific purposes (ESP) to the students in English language teaching (ELT). JET (Journal of English Teaching), 5(1), 55–66.

Haryono, E. P., Taju, D. R., Tombokan, F. F., & Lonan, T. P. (2020). Needs analysis dalam konteks ESP: Analisis kebutuhan pembelajaran bahasa Inggris mahasiswa teknik sipil. Jurnal Teknik Sipil Terapan, 2(3), 134–144.

Hutchinson, T., & Waters, A. (1987). English for specific purposes: A learning-centred approach. Cambridge University Press.

Javid, C. Z. (2013). English for specific purposes: Its definition, characteristics, scope and purpose. European Journal of Scientific Research, 112(1), 138–151.

Juliana, R., & Juliani, R. (2020). Penerapan general English dan English for specific purposes di perguruan tinggi khususnya pada pendidikan vokasi. Vocatech: Vocational Education and Technology Journal, 1(2), 79–85.

Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia. (2024). Keputusan Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi Nomor 244/M/2024 tentang Spektrum Keahlian SMK/MAK.

Mauludin, L. A., Ardianti, T. M., Prasetyo, G., Sefrina, L. R., & Astuti, A. P. (2021). Enhancing students' genre writing skills in an English for specific purposes class: A dynamic assessment approach. Mextesol Journal, 45(3).

Mohamed, O. I., & Alani, N. N. (2022). English for specific purposes: An overview definitions, characteristics and development. English Language Teaching, 15(12), 1–28.

Ni'mah, T. I. (2024). Learners' needs analysis: ESP materials for culinary arts department at SMKN 3 Purwokerto (Doctoral dissertation, State Islamic University).

Nurhasanah, T., & Kurniawan, E. (2023). ESP need analysis of computer and network engineering in vocational high school. J-SHMIC: Journal of English for Academic, 10(2), 139–154.

Rafiq, K. R. M., Hashim, H., & Md Yunus, M. (2024). Roles of English for specific purposes (ESP) in STEM education to leverage sustainable education. Asian Journal of University Education, 20(3), 741–751.

Risanti, M. G. D., Carolina, R. A., Fauzan, A., & Emeral. (2025). Vocational high school students' views on English subject for their current knowledge and future career. Journey: Journal of English Language and Pedagogy, 8(1), 48–63.

Sarwanti, S., Sotlikova, R., Novianto, D., & Indriani, L. (2023). Needs analysis of English skills amongst electrical engineering students in ESP contexts. JOLLT Journal of Languages and Language Teaching, 11(4), 669–682.

Srisudarso, M., & Nugraha, S. A. (2024). Improving students' English language skills with an English for specific purpose (ESP) approach. Proceedings of 5th Borobudur International Symposium on Humanities and Social Science (BISHSS 2023), 856, 242. Springer Nature.

Sugiyanto, W. (2022, March 25). Perkuat link and match, Direktur SMK sosialisasikan Kurikulum Merdeka pada jenjang SMK. Universitas Ahmad Dahlan News. https://news.uad.ac.id/perkuat-link-and-match-direktur-smk-sosialisasikan-kurikulum-merdeka-pada-jenjang-smk/

Sugiyono. (2023). Metode penelitian kuantitatif, kualitatif, dan R&D (Edisi revisi). Alfabeta.

Yuanti, E. E., & Vardhani, N. K. (2021). Penyusunan kurikulum blok Bahasa Inggris vokasional. Jurnal Vokasi Indonesia, 9(1), 1–10.