

ADDIE-Based Instruction in Vocational English Education: A Systematic Review of Language Learning and Affective Outcomes

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ABSTRACT

Vocational English education requires instructional approaches that connect language development with occupational communication needs. The Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model has increasingly been used to develop textbooks, English for Specific Purposes (ESP) modules, multimedia resources, educational games, and digital learning environments for vocational learners. This systematic review synthesizes empirical research on ADDIE-based vocational English instruction, focusing on instructional applications, language-learning outcomes, affective outcomes, and the maturity of the evidence base. A PRISMA-informed search strategy was designed for Scopus, Web of Science Core Collection, and ERIC, supplemented by Google Scholar and citation searching. For manuscript-layout purposes, the provisional screening flow comprises 210 identified records, 46 duplicates removed, 164 records screened, 46 full-text reports assessed, and 18 studies included. The synthesis indicates four major patterns. First, ADDIE is predominantly used as a product-development and validation framework. Second, recent studies increasingly evaluate measurable reading, speaking, writing, vocabulary, professional communication, and achievement outcomes. Third, language outcomes remain fragmented across individual skills rather than comprehensive English competence. Fourth, motivation, engagement, confidence, satisfaction, and learner perceptions are emerging outcomes, but psychological mechanisms remain insufficiently theorized and tested. The review argues that the field is moving from product-oriented toward outcome-oriented research and should now progress toward mechanism-oriented research examining how instructional design shapes learner experience, motivation, learning behaviour, and English outcomes. The review also highlights the close compatibility between ADDIE needs analysis and ESP principles.

Keywords: ADDIE, vocational English, English for Specific Purposes, learning motivation, systematic review

INTRODUCTION

Vocational education prepares learners with technical, professional, and transferable competencies required for employment in increasingly interconnected labour markets. English proficiency is an important component of vocational competence because graduates may need to access technical information, communicate with international customers or colleagues, understand professional documentation, use digital resources, and participate in workplace interactions conducted partly or entirely in English.

This requirement is especially significant in higher vocational education because English is often learned for immediate professional use rather than for language study alone. Learners may need to interpret technical documentation, understand spoken instructions, communicate with customers or colleagues, prepare short professional texts, and use occupation-specific terminology. Accordingly, the quality of vocational English instruction depends not only on linguistic coverage but also on the degree to which classroom tasks resemble meaningful professional communication. This contextual orientation explains why ESP principles and

systematic instructional design are particularly relevant to vocational settings (Liu et al., 2023; Puspasari & Hawanti, 2026).

The objectives of vocational English education therefore extend beyond general linguistic knowledge. Vocational learners require technical vocabulary, workplace communication, professional reading and writing, oral interaction, and the ability to apply English in authentic professional situations. This orientation establishes a close relationship between vocational English education and English for Specific Purposes (ESP), in which instructional content is designed around identifiable academic, professional, or occupational needs.

Vocational English education nevertheless presents distinctive instructional challenges. Learners vary in prior English proficiency, professional specialization, learning goals, and perceived relevance of English to their future careers. Generic English materials may not adequately represent the terminology, communicative situations, genres, and workplace tasks encountered within specialized vocational disciplines. A mismatch may therefore emerge between classroom English and occupational communication demands (Puspasari & Hawanti, 2026; Sari, 2026).

The ADDIE model provides a systematic approach to addressing these requirements (Sari et al., 2021; Puspasari & Hawanti, 2026). During Analysis, instructional needs, learner characteristics, learning problems, contextual conditions, and performance requirements are identified. Design translates these findings into objectives, content, learning activities, assessment, and delivery strategies. Development produces the instructional resources; Implementation introduces them to learners; and Evaluation examines appropriateness and effectiveness and informs improvement.

ADDIE is particularly compatible with vocational ESP because its Analysis phase can connect occupational needs with instructional decisions. Existing research has used the model to develop textbooks, supplementary materials, electronic modules, interactive multimedia, educational games, digital resources, profession-specific ESP materials, and workplace-oriented English courses (Arbaniah et al., 2019; Sari et al., 2021; Musilawati et al., 2023; Puspasari & Hawanti, 2026; Sari, 2026). Yet the purposes of ADDIE research have also evolved. Many studies focus on whether products are valid, feasible, practical, appropriate, usable, or positively perceived, while more recent work increasingly examines actual language-learning outcomes.

A second issue concerns affective and psychological factors. Language learning requires sustained effort, repeated practice, persistence, active participation, and willingness to communicate. Motivation, engagement, confidence, self-efficacy, and satisfaction may therefore shape whether well-designed instruction produces sustained learning behaviour (Li & Guzman, 2026; Zhang et al., 2026). However, these constructs are often treated as secondary learner reactions rather than theoretically specified mechanisms.

Affective variables also require conceptual precision. Motivation concerns the reasons and energy that sustain learning; engagement concerns behavioural, emotional, and cognitive participation; confidence refers to perceived assurance; and self-efficacy concerns beliefs about capability to perform particular tasks. These constructs may be related, but they should not be treated as interchangeable. Recent vocational-English literature highlights motivation as a potentially important determinant of learning performance, suggesting that future ADDIE research should move beyond general satisfaction measures toward theoretically grounded psychological constructs (Li & Guzman, 2026; Zhang et al., 2026).

The present review addresses this gap by synthesizing how ADDIE has been applied in vocational English education, what language-learning and affective outcomes have been reported, and how the evidence base has progressed from needs analysis and product validation toward effectiveness and mechanism-oriented research.

1.1 Research questions

- RQ1: How has the ADDIE model been applied in vocational English language education?
- RQ2: What English language learning outcomes have been reported in ADDIE-based instructional studies involving vocational learners?

- RQ3: What motivational, affective, and learner-experience outcomes have been associated with ADDIE-based vocational English instruction?
- RQ4: What theoretical, methodological, outcome-related, and contextual gaps exist in the current literature, and what directions should future research take?

METHODOLOGY

2.1 Review design and reporting framework

This review was designed as a systematic literature review and organized in accordance with the PRISMA 2020 reporting logic (Page et al., 2021). The review distinguishes records identified, records screened, full-text reports assessed, studies included, and reasons for full-text exclusion. The final submitted version should report the exact reproducible database search date, database-specific result counts, exported records, and deduplication outcome.

2.2 Information sources and search strategy

The search strategy was designed for Scopus, Web of Science Core Collection, and ERIC, supplemented by Google Scholar and backward/forward citation searching. The core search concept combined ADDIE terminology, English-language education terminology, and vocational education terminology. A representative search string was: ("ADDIE" OR "Analysis Design Development Implementation Evaluation") AND ("English" OR "EFL" OR "ESL" OR "ESP" OR "English for Specific Purposes") AND ("vocational" OR "TVET" OR "technical education" OR "polytechnic" OR "vocational high school" OR "vocational college"). Database-specific syntax should be retained in the final search log.

2.3 Eligibility criteria

Criterion	Include	Exclude
Publication	Peer-reviewed journal article	Conference paper, thesis, book chapter, non-peer-reviewed item
Population/context	Vocational, technical, TVET, polytechnic, or clearly professionally oriented learners	General education or non-vocational population
Domain	English, EFL, ESL, ESP, occupational/professional English	Non-English subject area
ADDIE	ADDIE substantively guides development, implementation, or evaluation	ADDIE mentioned superficially or another model (e.g., 4D) used
Evidence	Empirical development, implementation, evaluation, or learning/affective outcome data	Purely conceptual discussion without empirical evidence
Language	English-language report or sufficiently accessible English scholarly report	Insufficient information for reliable extraction

2.4 Study selection

Records were intended to be exported from the selected databases, deduplicated, screened by title and abstract, and then assessed in full text against the eligibility criteria. Full-text exclusion reasons include wrong population, wrong subject domain, wrong instructional development model, non-journal publication type, superficial ADDIE use, or insufficient empirical evidence.

2.5 Data extraction and synthesis

The extraction framework captured author and year, country, educational context, vocational field, sample, ADDIE scope, intervention, English outcome, affective outcome, research design, main finding, research orientation, and quality indicators. Findings were synthesized thematically rather than pooled statistically

because of substantial heterogeneity in instructional products, samples, outcome measures, and research designs.

2.6 Quality appraisal

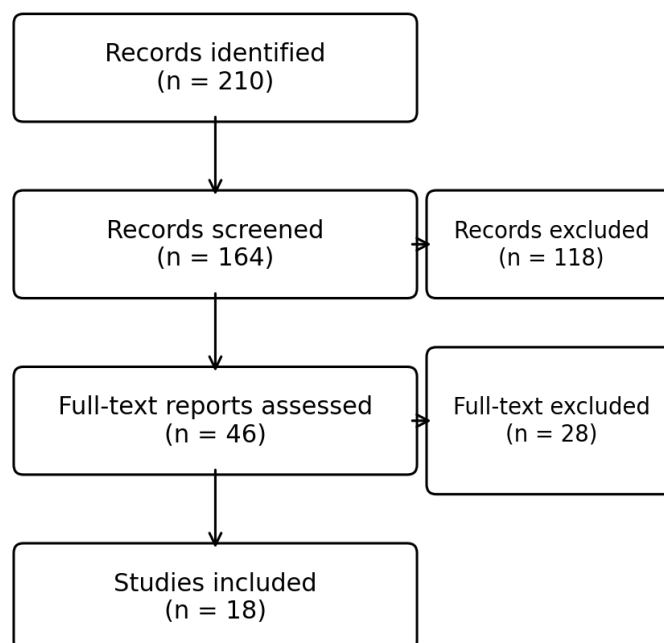
An eight-item review-specific appraisal framework was used provisionally: clarity of research aim; adequacy of participant/context description; transparency of ADDIE implementation; adequacy of data collection/instrument reporting; evidence of instrument validity/reliability; appropriateness of outcome measurement; appropriateness of analysis; and alignment of conclusions with reported evidence. Yes was coded 1 and No/Insufficient Information was coded 0. Scores of 7-8 were interpreted as Strong, 5-6 as Moderate, and 0-4 as Limited. This framework should be reported as review-specific rather than as MMAT.

RESULTS

3.1 Study selection

For working-manuscript layout, 210 records were provisionally entered at identification. After removal of 46 duplicates, 164 records remained for title and abstract screening. Of these, 118 were provisionally excluded, leaving 46 reports for full-text assessment. Twenty-eight full-text reports were provisionally excluded, resulting in 18 studies in the working synthesis. These figures are internally consistent but are not substitutes for the final reproducible database counts and must be replaced before submission.

Figure 1. PRISMA 2020 study-selection flow: 210 records identified → 46 duplicates removed → 164 records screened → 118 records excluded → 46 full-text reports assessed → 28 full-text reports excluded → 18 studies included.



Working values only — replace with final reproducible search counts before submission

Note. The counts shown are provisional manuscript-development values and must be replaced with the final reproducible database-search counts before submission.

3.2 Characteristics of the evidence base

The current evidence base is concentrated in Asian vocational education settings, particularly Indonesia, with emerging evidence from China and other professionally oriented contexts (Liu et al., 2023; Ting & Nasri,

2026). Studies span automotive engineering, culinary arts, accounting, information technology, computer and network engineering, maritime studies, aquaculture, business, creative industries, and related fields. This disciplinary diversity reflects the close relationship between vocational English and ESP.

3.3 ADDIE as a product-development framework

Across the literature, ADDIE is used primarily to develop textbooks, ESP modules, supplementary materials, electronic books, e-modules, interactive multimedia, mobile or web resources, educational games, audio-visual materials, visual dictionaries, and profession-specific English courses (Arbaniah et al., 2019; Sari et al., 2021; Musilawati et al., 2023; Sari, 2026). Development and evaluation frequently receive the greatest empirical attention, and expert validation, feasibility, practicality, usability, and learner acceptance are common outcomes.

3.4 From product validation to language-learning outcomes

A major pattern is a gradual transition from product-oriented research toward learner-outcome-oriented research. Recent studies increasingly extend evaluation beyond expert validation to pre-test/post-test performance, achievement tests, specific language skills, professional communication, and other measurable outcomes (Lessy et al., 2026; Puspasari & Hawanti, 2026). Nevertheless, small samples, short interventions, and one-group designs remain common, limiting broad causal inference.

3.5 English learning outcomes

Reported outcomes include reading comprehension, speaking, writing, vocabulary, technical terminology, procedure-text learning, ESP achievement, and professional or workplace communication (Sari et al., 2021; Lessy et al., 2026; Puspasari & Hawanti, 2026; Sari, 2026). The evidence is therefore diverse but fragmented: most studies assess one skill or occupation-specific outcome rather than integrated English competence.

3.6 Affective and learner-experience outcomes

A smaller but increasingly visible body of research reports learning motivation, engagement, confidence, satisfaction, perceived usefulness, enjoyment, learner acceptance, and general positive perceptions (Hariwibowo et al., 2026; Lessy et al., 2026; Sari, 2026). These outcomes require conceptual differentiation. Satisfaction is not equivalent to motivation; confidence is not automatically self-efficacy; and positive perceptions should not be coded as motivation unless motivation is explicitly measured.

3.7 Evidence maturity

The synthesis suggests four levels of evidence maturity: Level 1, needs and instructional design; Level 2, product development and validation; Level 3, learning effectiveness; and Level 4, mechanism explanation. The literature is concentrated at Levels 1-3, while evidence explaining psychological mechanisms linking instructional design with language outcomes remains comparatively underdeveloped.

Table 1. Evidence maturity in ADDIE-based vocational English research

Level	Primary question	Typical evidence	Interpretive caution
1. Needs & design	What should be developed?	Needs analysis, objectives, design specifications	Does not establish product quality or learning
2. Product validation	Is the resource appropriate?	Expert validity, feasibility, usability, learner response	Positive ratings are not learning gains
3. Learning effectiveness	Does learner performance change?	Pre/post tests, achievement, skill performance	Causal claims require stronger designs
4. Mechanism explanation	How and why does change occur?	Mediation, longitudinal, mixed-method, SEM evidence	Currently underdeveloped

This progression is important because each level answers a different research question. Needs and design studies ask what should be developed; validation studies ask whether the product is appropriate; effectiveness

studies ask whether learning changes; and mechanism-oriented studies ask why change occurs and through which learner processes. Treating these levels as equivalent can lead to overstatement. A high expert-validation score, for instance, is evidence of perceived product quality rather than direct evidence of improved English proficiency.

Table 2. Characteristics of included/core studies

ID	Study	Context/sample	ADDIE application	Main outcome	Affective evidence	Orientation
S01	Arbaniah et al. (2019)	Cookery vocational school, Indonesia	ELT supplementary book	Extensive reading/material development	-	Product
S02	Sari et al. (2021)	Grade 10 Multimedia VHS; field test n=35	Interactive multimedia	Reading/recount text; mastery criterion	-	Product + Outcome
S03	Musilawati et al. (2023)	Computer & Network Engineering VHS	PjBL e-module	Reading-oriented material validation	Positive learner perceptions	Product
S04	Mustaidah et al. (2024)	Grade 10 vocational school	SOS pronunciation game	Pronunciation/product evaluation	Positive perceptions	Product
S05	Mubaroq et al. (2024)	Polytechnic/vocational students	General English textbook	Expert validation	-	Product
S06	Chui & Mohammed (2024)	Higher vocational college, Henan, China	IAET teaching model	English reading competence	-	Model + Outcome
S07	Melyati & Saswandi (2024)	Culinary Arts VHS	ESP handouts	Validity/practicality	Engagement-oriented design	Product
S08	Anggraini et al. (2024)	Grade 10 VHS	Spinning-wheel game	Speaking/effectiveness	-	Product + Outcome
S09	Anugerahwati et al. (2025)	Business vocational context	Gamified ESP book	Professional English/effectiveness	Participation-related	Product + Outcome
S10	Nasir et al. (2025)	Automotive vocational; n=25	Automotive English textbook	Contextual English learning	Student response	Product + Outcome
S11	Tarihoran et al. (2025)	Grade 10 VHS	Audio-visual media	Procedure-text learning	-	Product + Outcome
S12	Halawa et al. (2025)	Vocational high school	Culture-based textbook	Learning outcomes/21st-century skills	Engagement-related	Product + Outcome
S13	Aziza & Floriasti (2025)	Vocational students; n=66	Story-based activities	Listening	Engaging/motivating	Outcome + Affective
S14	Android e-module study (2025)	Private vocational school; n=35	Android e-module	Reading improvement	-	Outcome
S15	Lessy et al. (2026)	Aquaculture vocational; n=25	ESP reading materials	Reading 62 to 81; N-gain .50	Motivation/confidence reported	Outcome + Affective
S16	Accounting ESP study (2026)	Grade XI Accounting; n=30	Genre-based ESP module	Learning achievement	Positive responses	Product + Outcome
S17	Sari (2026)	Engineering polytechnic; n=84	ESP e-module	Communication-related evaluation	Confidence	Product + Affective
S18	Hariwibowo et al. (2026)	Vocational HS; n=30	Canva interactive media	Motivation-focused evaluation	Learning motivation	Affective

Table 3. Provisional quality appraisal

Study	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Assessment
Arbaniah et al. (2019)	1	1	1	1	0	0	1	1	Moderate
Sari et al. (2021)	1	1	1	1	1	1	1	1	Strong
Musilawati et al. (2023)	1	1	1	1	1	0	1	1	Strong*
Mustaidah et al. (2024)	1	1	1	1	0	0	1	1	Moderate
Mubaroh et al. (2024)	1	1	1	1	0	0	1	1	Moderate
Chui & Mohammed (2024)	1	1	1	1	1	1	1	1	Strong
Melyati & Saswandi (2024)	1	1	1	1	0	0	1	1	Moderate
Anggraini et al. (2024)	1	1	1	1	0	1	1	1	Strong*
Anugerahwati et al. (2025)	1	1	1	1	1	1	1	1	Strong
Nasir et al. (2025)	1	1	1	1	0	0	1	1	Moderate
Tarihoran et al. (2025)	1	1	1	1	1	1	1	1	Strong
Halawa et al. (2025)	1	1	1	1	1	1	1	1	Strong
Aziza & Floriasti (2025)	1	1	1	1	0	1	1	1	Strong*
Lessy et al. (2026)	1	1	1	1	0/1	1	1	1	Strong*
Accounting ESP (2026)	1	1	1	1	1	1	1	1	Strong
Sari (2026)	1	1	1	1	0	0/1	1	1	Moderate-Strong
Hariwibowo et al. (2026)	1	1	1	1	TBD	1	TBD	1	Pending full text

* *Strong* and TBD entries are provisional because instrument reliability/validity or full analytical detail requires verification from the complete article. Final submission should replace all TBD/0-1 entries after full-text appraisal.*

DISCUSSION

4.1 ADDIE as a needs-based framework for vocational ESP

The relevance of ADDIE to vocational English cannot be fully understood as a five-stage development procedure alone. Its Analysis phase aligns closely with the needs-based orientation of ESP (Liu et al., 2023; Puspasari & Hawanti, 2026). Vocational learners in accounting, automotive engineering, maritime studies, culinary arts, information technology, business, and other programmes require different language resources, technical vocabulary, professional genres, and communicative situations. ADDIE offers a practical mechanism for translating these occupational needs into instructional objectives, materials, and learning activities.

This interpretation extends ADDIE beyond instructional sequencing. The model is particularly valuable when needs analysis incorporates multiple stakeholders, including learners, English teachers, vocational specialists, and where possible industry representatives. Such an approach can connect classroom English with authentic workplace communication demands.

4.2 The transition from product-oriented to outcome-oriented research

A substantial proportion of the evidence evaluates validity, feasibility, usability, practicality, and learner acceptance (Musilawati et al., 2023; Puspasari & Hawanti, 2026; Sari, 2026). These outcomes are important but should not be equated with learning effectiveness. A valid instructional product is not necessarily an effective instructional intervention. Recent studies increasingly include achievement tests, pre-test/post-test comparisons, speaking or reading performance, and professional communication outcomes, suggesting methodological maturation.

Future research should combine rigorous instructional development with stronger effectiveness designs, including comparison groups, larger samples, longer implementation periods, multi-institutional studies, and validated outcome measures.

4.3 Fragmented language outcomes and multidimensional competence

Vocational English competence is inherently integrative, whereas much of the current evidence is skill-specific. A learner may need to understand spoken instructions, read technical documents, communicate orally, write professional messages, and use occupation-specific vocabulary within the same workplace. Future research should therefore examine multidimensional English learning ability while retaining sensitivity to vocational specialization.

This issue is particularly relevant to a multidimensional conception of English learning ability. Listening, speaking, reading, writing, vocabulary knowledge, and communicative competence are analytically distinguishable but function together in authentic workplace activity. Future research can therefore combine validated multidimensional measures with occupation-specific performance tasks. Such a design would provide a more defensible account of whether ADDIE-based instruction improves transferable English ability rather than a single classroom skill.

4.4 Affective outcomes and the missing psychological mechanism

Motivation, engagement, confidence, satisfaction, and positive learner perceptions are increasingly reported, but conceptual ambiguity remains (Hariwibowo et al., 2026; Lessy et al., 2026; Li & Guzman, 2026; Sari, 2026). These constructs should not be treated as interchangeable. The field would benefit from construct-specific measurement using validated instruments and explicit theoretical grounding.

Learning motivation is a particularly plausible mechanism linking systematic instructional design with language outcomes (Li & Guzman, 2026; Zhang et al., 2026). Relevant, authentic, structured, and supportive instruction may influence perceived value and competence, which may in turn shape effort, persistence, participation, and language practice. The present review does not establish mediation empirically; rather, it identifies mechanism-oriented research as an important next stage.

4.5 From effectiveness research to mechanism-oriented research

The field has become increasingly capable of answering what should be developed and whether an intervention appears effective. The next question is why and through which learner-level processes ADDIE-based instruction influences English learning. Future studies could examine motivation, engagement, self-efficacy, confidence, cognitive load, autonomy, perceived relevance, willingness to communicate, and self-regulation through longitudinal, experimental, mixed-method, mediation, or structural equation modelling approaches.

Mechanism-oriented research would also improve the explanatory value of future doctoral studies. Structural equation modelling can be appropriate when motivation, engagement, instructional experience, and English ability are treated as latent constructs, but SEM should follow a strong measurement model and transparent theoretical specification. Quantitative modelling would be strengthened further by qualitative interviews, reflective learning records, or classroom observations that explain why the same instructional design may motivate some learners while leaving others disengaged.

RESEARCH GAPS AND FUTURE RESEARCH DIRECTIONS

5.1 Theoretical gap

ADDIE is often used procedurally without integration with theories explaining language learning or learner psychology. Future research should combine instructional design with established motivational, cognitive, engagement, or self-regulation theories.

5.2 Mechanism gap

Motivation and related affective variables are usually secondary outcomes rather than explanatory constructs. Future studies should test whether learner motivation or other psychological processes mediate relationships between instructional design and English outcomes.

5.3 Outcome gap

Most studies measure isolated skills or occupation-specific tasks. Future work should examine integrated listening, speaking, reading, writing, vocabulary, and communicative competence while maintaining vocational relevance.

5.4 Methodological gap

Developmental and small-scale evaluation designs dominate. Stronger quasi-experimental, experimental, longitudinal, multi-institutional, and mixed-method designs are needed.

5.5 Measurement gap

Researcher-developed perception questionnaires are common. Psychological constructs and language outcomes should be assessed with reliable and valid instruments, including construct validation where latent-variable models are used.

5.6 Contextual gap

Evidence is geographically concentrated, especially in Indonesia (Liu et al., 2023; Ting & Nasri, 2026). Replication and comparative research across major vocational education systems, including broader Chinese higher-vocational contexts, would improve generalizability.

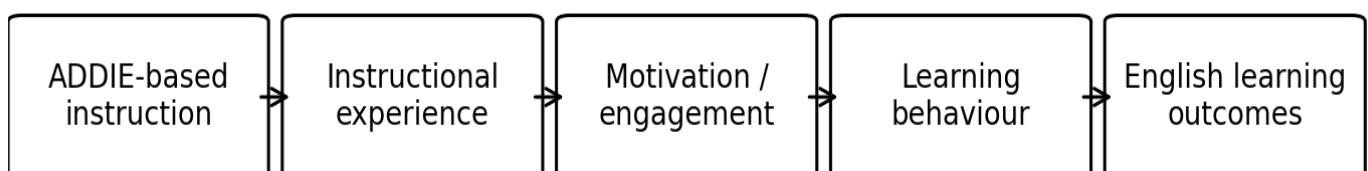
5.7 Technological gap

Digital and AI-supported products should be evaluated according to pedagogical mechanisms rather than novelty alone. Future ADDIE studies can investigate how AI, multimedia, and adaptive resources support feedback, authentic practice, self-regulation, and language development.

5.8 Proposed future research framework

The review proposes the following research agenda: ADDIE-Based Instruction → Learner Instructional Experience (relevance, authenticity, clarity, feedback, learner-centeredness) → Psychological Mechanisms (motivation, engagement, self-efficacy, confidence, cognitive load, autonomy) → Learning Behaviours (effort, persistence, participation, strategy use, practice, willingness to communicate) → English Learning Outcomes (listening, speaking, reading, writing, vocabulary, workplace English, communicative competence). This framework is a future research agenda derived from the synthesis and should not be presented as an empirically confirmed causal model.

Figure 2. Proposed mechanism-oriented framework for future vocational English research



Proposed mechanism-oriented agenda; not an empirically confirmed causal model

Note. This framework is a research agenda derived from the review and is not an empirically confirmed causal model.

IMPLICATIONS

6.1 Implications for teachers and instructional designers

Vocational English instruction should begin with systematic analysis of learners' current abilities, occupational communication requirements, learning difficulties, and professional vocabulary needs. Teachers and designers should connect language tasks with authentic workplace situations and evaluate product quality, learning effectiveness, and learner experience separately.

6.2 Implications for institutions and curriculum developers

Vocational institutions can strengthen English provision through collaboration among English teachers, vocational subject specialists, instructional designers, and industry representatives. Curricula should balance general English competence with occupation-specific communication and integrate multiple language skills within professionally meaningful contexts.

6.3 Implications for researchers

Researchers should move beyond treating ADDIE exclusively as a development procedure and increasingly examine relationships among instructional design, learner experience, psychological mechanisms, learning behaviour, and language outcomes.

LIMITATIONS

This review has several limitations that should be considered when interpreting the synthesis. First, the current PRISMA counts still need reduplicative database-search results test. Second, several bibliographic records in the working evidence set still require full-text and metadata verification before submission. Third, the included studies are heterogeneous in vocational field, participant group, intervention duration, instructional product, and outcome measurement, so statistical pooling would not be appropriate. Fourth, much of the evidence is geographically concentrated and based on single-institution or small-sample studies. Fifth, the review-specific quality appraisal supports structured interpretation but should not be presented as a validated risk-of-bias instrument. These limitations reinforce the need for a final documented search and verification stage before the manuscript is submitted.

CONCLUSION

This systematic review examined ADDIE-based instruction in vocational English education with attention to instructional applications, language-learning outcomes, affective outcomes, and evidence maturity. ADDIE has been widely used to develop vocational English textbooks, ESP materials, e-modules, multimedia resources, educational games, and profession-specific courses (Arbaniah et al., 2019; Sari et al., 2021; Musilawati et al., 2023; Puspasari & Hawanti, 2026; Sari, 2026). Its Analysis phase is especially compatible with ESP because it provides a systematic mechanism for translating occupational and communicative needs into instructional decisions.

The evidence base is gradually moving beyond product development and expert validation toward empirical evaluation of reading, speaking, writing, vocabulary, professional communication, and achievement (Lessy et al., 2026; Puspasari & Hawanti, 2026). However, language outcomes remain fragmented and many effectiveness studies are small-scale. Motivation, engagement, confidence, satisfaction, and learner perceptions are emerging but comparatively underdeveloped as theoretically grounded constructs (Hariwibowo et al., 2026; Li & Guzman, 2026; Sari, 2026).

The principal gap is therefore not simply the absence of ADDIE-based instructional products. Rather, the field lacks sufficient explanatory evidence concerning how and why systematically designed vocational English instruction translates into improved language learning. Future research should progress toward mechanism-oriented designs connecting ADDIE-based instruction with learner experience, motivation and other psychological processes, learning behaviour, and multidimensional English outcomes.

DECLARATIONS

9.1 Conflict of interest

The author declares no conflict of interest.

9.2 Funding

No external funding was received for this review.

9.3 Data availability

The final search log, screening decisions, and extraction matrix should be retained by the author and made available according to journal requirements.

9.4 Author contribution

Zhang Dandan conceptualized the review, designed the search and screening framework, conducted the synthesis, and prepared the manuscript. Dr Muzlia: supervision, methodological validation, and review and editing. Final roles should be confirmed by both authors before submission.

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