

Cognitive Expansion in Narrative–Descriptive Genre: A Gender-Responsive Diagnostic Study Across High School–Vocational College Transition

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ABSTRACT

The transition from high school to vocational higher education represents a critical stage in which prior literacy knowledge shapes students' readiness for academic and professional communication. Despite standardized EFL curricula, incoming vocational students often display uneven genre-based competence, particularly in narrative and descriptive writing. This study adopts a quantitative, diagnostic-oriented approach informed by Cognitive Diagnostic Assessment (CDA) principles to examine genre-related knowledge patterns and gender-mediated tendencies. A 30-item True/False diagnostic test, validated by two applied linguistics experts, was administered to 43 first-year students (27 females, 16 males) in the D4 English for Business and Professional Communication program at Politeknik Negeri Sriwijaya. The instrument targeted structural, linguistic, and functional attributes of narrative and descriptive texts, and data were analyzed descriptively and comparatively. Findings (RQ1) reveal uneven genre knowledge, with mean accuracy for narrative items (81%) exceeding descriptive ones (61%), reflecting differences in familiarity rather than linguistic deficiency. In addressing (RQ2), the gender-disaggregated results indicate that female students tended to excel in causal reasoning, thematic inference, and figurative interpretation, whereas males demonstrated stronger performance in factual coherence and structural precision. Regarding (RQ3), these disparities reflect cognitive diversification rather than inequality, illustrating differentiated learning pathways shaped by prior literacy exposure and gendered engagement. Although the study does not implement full psychometric CDA modeling, the diagnostic instrument provides formative insights into students' genre cognition at a key educational transition. The findings suggest that gender-responsive, diagnostic-informed pedagogy can support equitable literacy development in vocational English contexts by leveraging complementary cognitive strengths.

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INTRODUCTION

The swift changes in today's workforce, marked by the rise of new professions and responsibilities, have driven educational institutions to seek effective ways to equip and train their students to adapt to these emerging demands. In this context, the transition from high school to

vocational higher education represents a critical juncture in students' academic and professional development. This stage not only requires the cultivation of greater intellectual autonomy but also reorganization of prior knowledge into more advanced forms of literacy, critical thinking, and applied disciplinary reasoning, ensuring students are prepared to navigate complex real-world challenges. As Chimanya (2025) and Christiaens et al. (2021) highlighted, the transition from secondary to tertiary education marks a critical period of psychological and educational identity development, demanding students' adaptation to independent learning, intensive reading, and new disciplinary norms.

However, many students enrolled in vocational education and training (VET) programs encounter challenges in developing proficient reading and writing skills and the transferability of high school literacy skills to vocational English contexts remains uneven. Such difficulties often manifest in students' writing performance, where limited academic literacy constrains their capacity to express ideas clearly and effectively across genres. Moreover, effective writing is also a complex and demanding skill (Nasution et al., 2024) including in narrative and descriptive genres. Addressing these literacy gaps is therefore essential for equitable academic readiness and for building language-based professional competencies relevant to the creative industries. In this regard, courses such as Narrative & Descriptive Writing in the D4 English for Business and Professional Communication program play a pivotal role in bridging academic literacy with professional creativity. Nevertheless, little is known about how these foundational writing skills are retained or adapted as students transition into applied linguistics programs in vocational settings. This neglect obscures the roots of academic and professional preparedness, particularly in early study stages where students develop the communicative and creative literacies demanded by the industry. Gender further complicates literacy development. While English proficiency itself tends to be gender-neutral, greater variation in writing suggests social and cognitive influences on this skill (Denies et al., 2022). Females often demonstrate stronger verbal reasoning and holistic comprehension, while males show higher analytical precision (Ibáñez & Santos Díaz, 2023; Thomas et al., 2023). Yet, when contextual and instructional factors are accounted for, gender alone seldom predicts literacy outcomes (Syamsuri & Bancong, 2022; Karim et al., 2024).

Despite this, limited research has examined gender differences across text genres, even though prior literacy competence in high school strongly supports success in vocational and professional communication programs (Musawar & Zulfiqar, 2025). This highlights the need to explore how such competencies evolve during the educational transition. To address this gap, diagnostic approaches can offer deeper insights into gendered literacy variation. Integrating Cognitive Diagnostic Assessment (CDA) enables researchers to identify learners' conceptual understanding of text and language, thereby linking proficiency studies with equitable instructional design across secondary and vocational contexts. CDA systematically targets learning disparities by identifying subskills and providing focused remediation (Li et al., 2021). Furthermore, true-false testing with feedback has been shown to enhance text retention more effectively than rereading or typing (Uner et al., 2022). Nevertheless, their application in the high school-polytechnic transition remains scarce, and gender-based knowledge gaps continue to be underexplored, leading to conceptual and pedagogical challenges in EFL and vocational education. Assuming uniform literacy readiness risks reinforcing inequities (Schaper, 2024), while ignoring genre- and gender-related variation perpetuates disadvantage (Ridha et al., 2024). Evidence of gender and language transfer effects on EFL writing errors (Sugianto et al., 2023) further underscores the importance of early diagnostic intervention.

Hence, this study employs a True/False diagnostic test to assess first-year polytechnic students' prior knowledge of narrative and descriptive texts, mapping gender-based gaps to evaluate literacy readiness for vocational English learning. This provides an empirical foundation for the disaggregated gender analysis and fine-grained pedagogical insights presented in the following section. By linking diagnostic assessment to gender-based analysis, the study moves beyond aggregate measures to reveal nuanced patterns of literacy development. This approach

supports the threefold objectives evaluating prior knowledge, examining gender-based performance, and interpreting pedagogical implications. The True/False diagnostic tool offers a fine-grained lens to identify disparities that broader literacy assessments may overlook, situating findings within the critical high school–polytechnic transition. Ultimately, this integration establishes a data-driven foundation for designing curricula that address differentiated literacy needs, fostering both academic success and professional communication competence in vocational and creative contexts.

Accordingly, this study employs a True/False diagnostic test to examine first-year polytechnic students' prior knowledge of narrative and descriptive texts within a vocational English program. The study is guided by three research questions: (RQ1) To what extent do first-year vocational students demonstrate differential prior knowledge of narrative and descriptive genres? (RQ2) How do male and female students differ in their performance across genre-related cognitive attributes? (RQ3) How can observed gender-based differences be interpreted in relation to cognitive diversification and pedagogical implications rather than linguistic inequality? By addressing these research questions, the study moves beyond aggregate proficiency measures to reveal nuanced patterns of genre cognition at the high school–vocational transition. The diagnostic approach provides an empirical foundation for interpreting gender-disaggregated performance and for informing adaptive, gender-responsive pedagogy in vocational English education. Ultimately, this integration supports curriculum design that acknowledges differentiated literacy pathways while fostering both academic readiness and professional communication competence in creative and vocational contexts.

REVIEW OF LITERATURE

Narrative and descriptive writing constitute foundational genres that shape early academic literacy development in EFL contexts. Narrative writing, far from being peripheral, underpins higher literacy skills by shaping reasoning, coherence, and identity expression (Lillich, 2025). Its structure, comprising orientation, complication, climax, and resolution, fosters causal and logical thinking. In vocational EFL settings, narrative writing further enhances cohesion and stylistic control through connectives and pronouns (Rizkiawan et al., 2025), supporting creative-industry practices such as storytelling, content production, and branding communication. In contrast, descriptive writing functions as a foundational genre through which learners develop the ability to observe, conceptualize, and linguistically represent sensory experience by constructing detailed depictions of objects, places, or events that enable readers to form clear and precise mental images (Purnamasari et al., 2021; Putri et al, 2025). These skills underpin visual description, promotional writing, and digital narration. However, persistent weaknesses in vocabulary, grammar, and textual mechanics continue to constrain students' genre performance, indicating the need for more targeted instructional and diagnostic approaches (Hafizah et al., 2024; Putri, 2025). At the polytechnic level, literacy expands into applied dimensions such as paraphrasing, inference, and elaboration, which build upon students' prior linguistic and cognitive foundations (Carlson et al., 2025).

Research on gender and literacy presents nuanced and sometimes contradictory findings. While general English proficiency is often reported as gender-neutral, writing performance shows greater variability, suggesting the influence of social, cognitive, and instructional factors (Denies et al., 2022). Female learners tend to demonstrate stronger verbal reasoning and holistic comprehension, whereas male learners often exhibit greater analytical precision and structural control (Ibáñez & Santos Díaz, 2023; Thomas et al., 2023). Nevertheless, when contextual and pedagogical variables are considered, gender alone rarely serves as a robust predictor of literacy outcomes (Syamsuri & Bancong, 2022; Karim et al., 2024). Prior literacy competence developed in high school remains a consistent predictor of success in vocational English programs (Musawar & Zulfiqar, 2025), yet empirical research has paid limited attention to how genre-specific literacy knowledge is redistributed and recontextualized during the transition into tertiary vocational

education.

CDA has been recognized for its capacity to identify learners' conceptual strengths and weaknesses by mapping discrete subskills involved in reading and writing (Li et al., 2021). When applied to genre learning, CDA offers the potential to move beyond aggregate proficiency scores by revealing patterns of structural, linguistic, and functional genre awareness. True–false testing formats, although limited in diagnostic precision, have been shown to facilitate rapid retrieval and retention of textual knowledge when used formatively (Uner et al., 2022). Despite this potential, existing studies tend to employ CDA either in large-scale psychometric modeling or in isolated skill assessment, leaving a gap in research that applies CDA-informed diagnostic logic to genre-based literacy at the high school–vocational transition. Previous scholarship has raised concerns about inequities that arise from assuming uniform literacy readiness among incoming tertiary students (Schaper, 2024) and from overlooking genre- and gender-related variation in EFL writing development (Ridha et al., 2024). Studies on gender and language transfer effects in EFL writing errors further underscore the importance of early diagnostic intervention (Sugianto et al., 2023). However, little research has integrated genre-specific analysis, gender-disaggregated patterns, and diagnostic assessment at the point of entry into vocational higher education. This study addresses this gap by offering a diagnostic-informed examination of narrative and descriptive genre knowledge, reframing gender differences as cognitive diversification rather than deficit, and situating genre literacy within the creative and professional demands of vocational English programs.

METHOD

Following the CDA framework, this study employed a True/False diagnostic test to identify latent knowledge structures and gender-based misconceptions in genre literacy. Within this framework, understanding how gender differences manifest in literacy knowledge is essential for refining diagnostic interpretations. A quantitative design was adopted to assess students' prior knowledge of narrative and descriptive materials within a vocational English program. This approach enabled systematic measurement of knowledge acquisition, thereby facilitating the identification of misconceptions and analysis of gender-based variations. A census method was applied to all 43 first-year students in the D4 English for Business and Professional Communication program to ensure data reliability and minimize sampling bias. Participants were enrolled in the Narrative & Descriptive Writing course, which aims to develop communicative and creative competencies for the creative and professional industries. Gender data were collected anonymously to protect participants' privacy while allowing comparative analysis. Students were informed that the test would not affect their grades but served solely as a diagnostic tool to evaluate their readiness for vocational-level academic and professional writing. The cohort consisted of a relatively small and uneven gender distribution (27 females, 16 males), representing diverse secondary and regional backgrounds at the point of transition from secondary to vocational higher education. Given the sample size and modest score differences between groups, gender-related findings are interpreted cautiously and are intended to indicate tendencies rather than stable or generalizable cognitive profiles. Accordingly, gender-based comparisons are treated as exploratory and contextual, serving to inform pedagogical reflection rather than to support definitive claims about gendered literacy differences.

The diagnostic instrument consisted of 30 dichotomous True/False items, evenly distributed across the two target genres (15 narrative and 15 descriptive) to ensure balanced genre representation and comparable diagnostic coverage across attributes, in line with attribute-based assessment design in diagnostic testing (Lee & Sawaki, 2009; Li et al., 2021). Each item targeted specific micro-skills within the CDA framework, including genre recognition, structural awareness, linguistic feature identification, and functional purpose. The instrument's content and construct validity were confirmed through expert validation by two applied linguistics lecturers, who evaluated item clarity, relevance, and alignment with course objectives. Reliability was

ensured through a standardized digital administration using Google Forms during the first-class meeting, under lecturer supervision. The automated scoring system in Google Forms further supported score consistency and minimized human error. Each participant was allowed to submit responses only once, and editing options were disabled to prevent changes after submission. These procedures maintained uniform testing conditions and reduced potential bias or external interference. To ensure procedural consistency, the instrument was administered during the first week of the semester, before any formal instruction in the Narrative and Descriptive Writing course. Responses were coded dichotomously for straightforward statistical processing and reliability assessment. The test was completed within a 15-minute time frame under direct supervision to prevent collaboration or external assistance.

Gender data were recorded separately to enable disaggregated comparative analysis. To enhance analytical reliability and validity, the study employed standardized administration procedures, supervised testing conditions, and automated scoring to ensure consistency across responses. Data analysis employed descriptive and comparative statistics at the aggregate level, focusing on three aspects: (1) overall prior knowledge, (2) gender-based performance differences, and (3) performance variation between narrative and descriptive items. Rather than making item-level or individual diagnostic claims, the analysis emphasizes distributional patterns and cross-group comparisons, which reduces the influence of random guessing inherent in dichotomous test formats. Accordingly, the findings are interpreted as indicative of relative genre familiarity and cognitive orientation rather than precise measurements of individual mastery. Frequency distributions, cross-tabulations, and percentage scores were used. The study complied with ethical research standards for human research particularly involving vocational higher education students. Participation was voluntary, informed consent was obtained, and all data were anonymized and reported in aggregate form. Procedures were designed to minimize disruption to ongoing learning activities while maintaining both validity and integrity of the findings. Overall, this diagnostic approach provided an evidence-based foundation for identifying specific literacy gaps as well as informing targeted pedagogical interventions in applied linguistics and vocational English instruction.

FINDINGS AND DISCUSSION

Findings

The diagram and table below present the diagnostic results of True/False statements on narrative and descriptive writing analyzed through the CDA framework. The data illustrate students' prior genre knowledge and gender-based performance, highlighting how male and female learners demonstrate distinct yet complementary cognitive tendencies in understanding structural and interpretive aspects of narrative and descriptive texts.

Table 1. True/False Statements on Narrative & Descriptive Writing

No	Narrative Writing
1	Narrative texts mainly aim to entertain the reader by telling a story.
2	The generic structure of a narrative usually includes Orientation, Complication, Climax, and Resolution.
3	In a narrative, Orientation usually introduces the characters, setting, and situation.
4	The Resolution in a narrative always provides a happy ending.
5	Complication in a narrative text refers to the main problem faced by the characters.
6	Narratives never use past tense verbs.
7	Direct speech (dialogues) is commonly found in narrative texts.
8	The purpose of a narrative is to inform readers about factual events.
9	A narrative's moral lesson is always stated explicitly in Resolution.
10	Figurative language, such as similes and metaphors, can be found in narrative texts.
11	A fairy tale is an example of a narrative writing.
12	Climax can be referred as the turning point of the story.
13	Onomatopoeia can appear in narrative texts to enhance storytelling.
14	Myths, legends, and fables are not types of narrative writing.

No	Descriptive Writing
1	Descriptive texts mainly aim to describe a person, place, object, or thing in detail.
2	The generic structure of a descriptive text includes Identification and Description.
3	Identification in descriptive text introduces the subject being described.
4	Linking words are never used to connect sentences in descriptive texts.
5	Adjectives are not frequently used in descriptive texts to give details.
6	The Description part of a descriptive text gives specific features of the subject.
7	Descriptive texts are aimed to entertain readers.
8	A text describing Ampera Bridge is an example of a descriptive writing.
9	Identification is optional in all descriptive texts.
10	Identification always comes after Description in descriptive text.
11	When describing a person, a descriptive text usually includes physical details and personality traits.
12	Descriptive texts never include sensory details such as sight, sound, or smell.
13	A restaurant review is not an example of a descriptive text.
14	Present tense is never used in descriptive texts.
15	The goal of descriptive text is to make readers imagine the subject clearly.

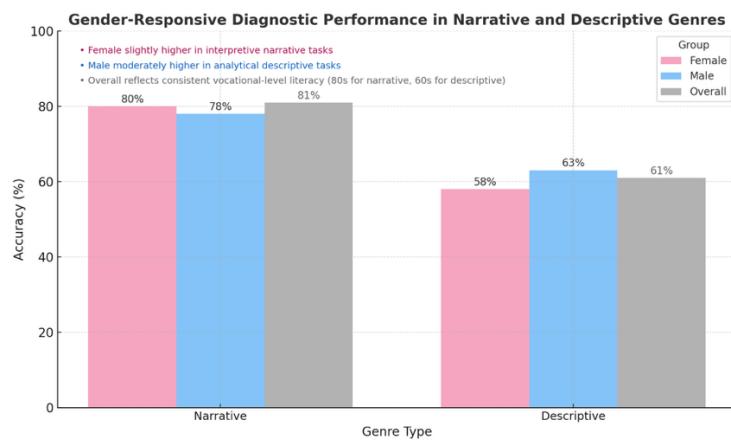


Figure 1. Gender-Responsive Diagnostic Performance

These overall findings serve as a preliminary overview of the students' genre cognition profile. The detailed interpretation of each component and its pedagogical implications will be elaborated in the subsequent sections according to the Research Questions, encompassing overall genre knowledge, gender-based performance patterns, and curriculum-related implications.

Prior Knowledge of Narrative and Descriptive Materials Among First-Year Polytechnic Students

The diagnostic results derived from the thirty-item True/False test provide a detailed picture of students' genre knowledge as they transition from high school to vocational higher education. The findings indicate that students' prior knowledge is moderate yet developmentally uneven, showing distinct patterns across text types rather than evidence of deficiency. The mean accuracy rate for narrative items (81%) was higher than that for descriptive items (61%), reflecting a difference not in ability but in *genre familiarity and cognitive emphasis*. This variation can be understood as a natural outcome of different literacy exposures in secondary education, and the beginning of a more applied literacy focus in vocational contexts. In the narrative section, students demonstrated a solid grasp of structural schemata (orientation, complication, climax, and resolution) and could clearly identify the communicative purpose of narrative texts. High accuracy on statements such as "*Narrative texts mainly aim to entertain the reader*" and "*Orientation introduces the characters and setting*" indicates that learners have internalized the functional and structural foundations of narrative discourse. Yet, their responses to items assessing interpretive comprehension (for instance, "*The Resolution always provides a happy ending*" or "*A moral*

lesson is always stated explicitly”) revealed that they are still strengthening their ability to process implicit meaning, causal linkage, and moral inference.

This transitional pattern suggests that learners are moving from structural recognition which is the ability to identify form to interpretive construction, the ability to derive and manipulate meaning, which is precisely the cognitive shift vocational education seeks to advance. Such cognitive development does not occur in isolation but extends to their writing performance. Conversely, Kurniawan (2024) emphasizes that students develop a sense of responsibility for their writing, demonstrating cognitive awareness in constructing narratives and integrating supporting data. In the descriptive section, students showed strong recognition of the genre’s purpose and basic linguistic features such as the use of adjectives, present tense, and identification–description structure. However, they demonstrated less consistency when tasks required them to integrate information into a cohesive descriptive sequence. Lower accuracy on items such as “*Identification always comes after Description*” and “*Descriptive texts never include sensory details*” suggests that students are in the process of consolidating their awareness of rhetorical order and sensory elaboration. This pattern is not unexpected. At the secondary level, descriptive tasks often emphasize factual detail and observational precision, whereas vocational education extends this foundation toward applied descriptive communication for professional, creative, and commercial purposes. In short, the findings highlight continuity rather than rupture between educational stages.

Through genre-based pedagogy (Bhusal & Shrestha, 2024; Rana, 2021), high school instruction provides the structural foundation for genre recognition, while vocational education advances applied literacy through creative, inferential, and communicative development. Collectively, the results indicate that first-year vocational students possess a strong schematic grasp of genre structures but still need refinement in inferential and compositional reasoning. Their literacy competence is dynamic that is positioned between recognition and recontextualization. The transition into vocational creative writing thus reflects an evolution of cognitive complexity rather than a remediation of prior learning. It offers an opportunity to extend genre knowledge through imaginative and professionally oriented practice. Within this continuum, the Narrative and Descriptive Writing course serves as a pedagogical bridge by transforming structural literacy into creative agency essential for storytelling, branding, and content production in the creative industry–based curriculum of the D4 English for Business and Professional Communication program.

Male and Female Students’ Performance Patterns Across Narrative and Descriptive Texts

The gender-disaggregated results reveal complementary cognitive profiles that illustrate how literacy competencies evolve differently across learners during the high school–vocational transition. Female students achieved a slightly higher mean score in the narrative section (79%) than male students (78%), while male students marginally outperformed females in the descriptive section (62% vs. 59%). Although these numerical differences are modest and were not examined using inferential statistical testing, their qualitative implications remain pedagogically informative, as they suggest differentiated approaches to meaning making rather than performance hierarchies. Female learners demonstrated consistent strength in items that required interpretive reasoning, affective engagement, and recognition of figurative or thematic dimensions. Their accuracy on statements such as “*Figurative language, such as similes and metaphors, can be found in narrative texts*” and “*Climax can be referred to as the turning point of the story*” reflects a holistic and empathetic engagement with text. These patterns are interpreted as descriptive tendencies rather than statistically confirmed advantages, and they align with existing research in applied linguistics indicating that female learners often display higher verbal reasoning and integrative comprehension skills. Similarly, studies by Hirnstein et al. (2022) indicate that women tend to excel in verbal tasks, particularly in fluency and memory performance, while findings by Goecke et al. (2026) report higher achievement in creative thinking and reading. In the context of

the Narrative and Descriptive Writing course, which functions as a creative-industry module, such interpretive orientation plausibly supports competence in storytelling, character development, and brand narrative design.

Male learners, in contrast, displayed greater consistency in responding to items emphasizing factual structure and logical organization. Higher accuracy on statements such as “*The generic structure of a descriptive text includes Identification and Description*” and “*Description gives specific features of the subject*” demonstrates a rule-based and analytic cognitive orientation. This procedural precision supports tasks central to vocational communication such as technical writing, product description, or report composition where clarity, concision, and factual accuracy are paramount. As with the narrative findings, this orientation is discussed as an observed pattern rather than a statistically significant difference, corresponding to the descriptive literacy demands of technical and professional genres. Importantly, these gendered patterns should not be construed as binary or fixed, but as indicators of differential engagement modes. They represent the intersection of educational experience, social interaction, and cognitive preference rather than innate capability. Within the broader framework of this study’s title, these differences embody the “gender knowledge gaps” not as deficiencies but as sites of pedagogical opportunity. By framing these results as descriptive and exploratory, the analysis avoids overgeneralization while still offering pedagogically relevant insights. Understanding how male and female learners engage distinctively with textual interpretation enables instructors to design more inclusive pedagogical interventions by encouraging female learners to refine analytical precision and male learners to cultivate narrative inference and creativity. In doing so, the vocational classroom becomes a microcosm of the creative industry itself, where collaborative literacy draws strength from diversity in perspective, reasoning, and expression.

Curricular and Pedagogical Implications of Observed Knowledge Gaps

The diagnostic findings offer valuable implications for curriculum development and instructional design within the vocational English context, particularly in creative-industry programs where literacy functions as both communicative and productive capital. The results do not indicate learner inadequacy but instead map a developmental continuum of genre competence extending from high school literacy toward higher-order creative communication. Rather than yielding item-level diagnostic prescriptions for individual remediation, the findings provide curriculum-relevant patterns of genre cognition that can inform instructional emphasis at the course and task-design level. The observed tendencies namely strong structural recognition, moderate interpretive inference, and gender-differentiated orientations, thus constitute an empirical basis for data-informed, equitable, and context-sensitive pedagogy. For narrative literacy, the findings suggest that instruction should prioritize the development of interpretive and creative reasoning while building on learners’ existing schematic knowledge. Although the diagnostic instrument does not isolate specific misconceptions at the individual attribute level, aggregated response patterns indicate the need to move beyond structural recognition toward causal, thematic, and inferential engagement. Learning activities such as narrative mapping, conflict-resolution modelling, and multimodal storytelling can therefore be implemented to support this progression, enabling students to transform familiar narrative templates into original and contextually relevant texts. These approaches align with vocational objectives that emphasize storytelling, brand narration, media production, and digital content creation.

For descriptive literacy, the findings highlight the importance of strengthening linguistic precision, coherence, and sensory elaboration through authentic, industry-linked tasks. Rather than addressing discrete item-level weaknesses, instruction can respond to observed genre-level patterns by foregrounding descriptive sequencing, sensory specificity, and rhetorical purpose. Activities such as visual-based writing, promotional description, and data-to-text transformation allow students to experience how descriptive language operates as both an informative and persuasive resource in professional communication. The pedagogical aim is to advance

descriptive competence from surface-level observation toward strategic linguistic visualization, a core skill in marketing, design communication, and creative content development. From a gender-responsive perspective, the findings support pedagogical differentiation without reinforcing fixed or essentialist assumptions. Male students observed analytical orientation can be productively engaged through structured problem-solving, classification, and organizational tasks, while female students' interpretive engagement can be extended through thematic synthesis, metaphorical exploration, and narrative elaboration. These strategies are proposed at the level of instructional design rather than individual diagnosis, reflecting the descriptive scope of the data. Such balanced pedagogy cultivates complementary strengths, supporting what Schaper (2024) conceptualizes as literacy equity through pedagogical complementarity.

Methodologically, the use of a CDA-informed diagnostic approach in this study demonstrates the potential of low-stakes diagnostic instruments to function as tools for formative reflection rather than fine-grained remediation. The True/False test, while limited in its ability to identify specific misconceptions per attribute, effectively captured broad patterns of genre awareness across structural, linguistic, and functional dimensions. In this sense, the diagnostic value of the instrument lies in revealing distributions of familiarity and orientation, rather than precise mastery profiles. This constitutes a diagnostic continuum along which instruction can be aligned at the curricular level. Consistent with Li et al. (2021), who emphasize the role of diagnostic assessment in linking evidence to instruction, the present findings provide an evidence-based rationale for scaffolding students' progression from structural recognition to applied and creative literacy. The results reinforce a central premise of the study: that literacy development across educational stages is continuous, contextual, and constructively diverse. High school literacy is not positioned as a point of deficiency but as a foundation of schematic competence upon which vocational education builds interpretive, applied, and professional literacy. The high school–polytechnic transition thus emerges not as a gap requiring remediation, but as a phase of cognitive expansion in which prior knowledge is reactivated and elevated to meet the communicative and creative demands of vocational learning. Ultimately, by addressing gendered patterns and developmental variation through diagnostic-informed yet pedagogically grounded instruction, vocational education can fulfil its creative-industry mandate producing communicators who are both structurally literate and creatively fluent, capable of transforming genre knowledge into narrative innovation and descriptive precision.

Discussion

The diagnostic outcomes illuminate a continuum of genre cognition rather than a dichotomy of competence versus deficiency. The higher accuracy in narrative items (81%) compared to descriptive ones (61%) suggests that vocational students possess strong schematic awareness of text structures but are still developing the interpretive and compositional reasoning required for creative and professional application. This pattern signifies a stage of progressive literacy recontextualization. In this stage, learners transition from structural recognition acquired through high school instruction to applied creativity and inferential engagement demanded by vocational education. In this sense, the high school–college transition represents a process of cognitive expansion, where structural literacy evolves into adaptive, professional, and expressive literacy within the creative industry domain. Such developmental movement underscores that vocational literacy does not remediate previous learning but rather deepens and diversifies it through applied creativity and communicative purpose. The gender-based variations observed in the diagnostic data further demonstrate cognitive diversification and contextual learning tendencies rather than performance hierarchies. Within the scope of the present dataset, female learners displayed stronger consistency on items involving figurative language, thematic reasoning, and interpretive inference, indicating affective and interpretive engagement with narrative discourse. Male learners, conversely, exhibited greater consistency in structurally oriented descriptive tasks, reflecting procedural precision and analytical organization relevant to factual writing, product

description, and technical communication. These tendencies are interpreted as patterns of genre engagement observable in this sample, rather than generalized claims about gendered literacy ability. Studies reporting gender differences in creativity, critical thinking, and empathy are therefore referenced to situate these findings within broader discussions, not to substitute for or outweigh the study's own empirical evidence.

These differentiated orientations exemplify equity through complementarity, where gendered literacy profiles enrich collective classroom cognition rather than divide it. The observed “gender knowledge gaps,” therefore, are not cognitive deficiencies but expressions of diverse meaning-making approach identifiable through diagnostic assessment. They represent sites of collaborative literacy development that allow learners to contribute distinct strengths toward shared communicative and creative goals. Pedagogically, these findings reinforce the value of assessment as a formative diagnostic instrument that informs instruction rather than certifies mastery. Although the study does not implement full psychometric CDA modeling, the CDA-informed diagnostic approach enables the identification of genre-specific tendencies that can guide instructional emphasis and curriculum alignment. Instructional design should thus capitalize on these insights by scaffolding learners’ progression from structural accuracy toward interpretive fluency and applied creativity. For narrative literacy, pedagogical focus may promote causal reasoning, multimodal storytelling, and character development, while descriptive literacy instruction may emphasize coherence, sensory precision, and contextual purpose. Through such targeted interventions, educators can nurture a classroom environment grounded in collaborative literacy development, where gender diversity and genre awareness interact productively. This pedagogical orientation aligns with Putri (2025)’s play-based approach, such as the use of 3D jigsaw puzzles, which can strengthen young adult learners’ social engagement and collaborative descriptive writing by providing shared spatial tasks that encourage interaction, meaning negotiation, and contextualized description. Ultimately, the discussion reframes so-called “gender knowledge gaps” as catalysts for pedagogical innovation. Within the evidentiary limits of this diagnostic study, vocational English education emerges as a site of cognitive expansion in which structural literacy is reorganized into creative, professional, and communicative competence relevant to the creative industry landscape.

CONCLUSIONS

This study redefines the notion of “gender knowledge gaps” in narrative and descriptive genre learning not as deficits but as indicators of differentiated cognitive engagement within the continuum of literacy development. The diagnostic findings summarize three key results. First (RQ1), first-year vocational students demonstrated uneven genre knowledge, with higher mean accuracy in narrative items (81%) than in descriptive items (61%), indicating differences in genre familiarity rather than linguistic deficiency. Second (RQ2), gender-disaggregated analysis revealed differentiated performance patterns: female students showed relative strength in interpretive, inferential, and figurative processing, whereas male students demonstrated greater consistency in structural accuracy and factual coherence. Third (RQ3), these differences reflect cognitive diversification shaped by prior literacy exposure and engagement rather than gender-based inequality. In terms of impact and pedagogical implications, the findings suggest that vocational literacy development benefits from gender-responsive and diagnostic-informed instruction. Strong schematic awareness of genre structures provides a foundation for further scaffolding in interpretive, inferential, and compositional reasoning skills essential for transforming structural literacy into creative and professional fluency. Recognizing gendered cognitive tendencies as complementary resources enables instructors to design inclusive learning environments that balance analytical precision and creative interpretation, aligning literacy instruction with the communicative demands of vocational and creative-industry contexts.

This study also acknowledges several limitations. The diagnostic instrument relied on a True/False format, which is susceptible to guessing and does not allow correction-for-guessing or

confidence-based responses. In addition, although the study was informed by CDA principles, it did not implement full psychometric CDA modeling (e.g., Q-matrix specification, attribute mastery profiles, or model-fit indices), and the relatively small sample size limits generalizability. Consequently, the findings should be interpreted as formative diagnostic insights rather than definitive measures of genre mastery. Based on these limitations, several recommendations are proposed. Future research should incorporate more robust CDA methodologies, including multi-option items, confidence ratings, reliability indices, and formal diagnostic modeling to strengthen measurement validity. Longitudinal designs could further examine how genre cognition evolves across semesters in vocational programs. Pedagogically, early-semester diagnostic assessment should be integrated into vocational English curricula to support adaptive scaffolding that advances learners from structural recognition to interpretive fluency and professional creativity. Through such evidence-based and equity-driven approaches, vocational institutions can cultivate learners who are both analytically rigorous and imaginatively fluent, capable of transforming genre knowledge into adaptive, industry-relevant communication.

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