

GRAPHIC NOVELS AS MULTIMODAL TOOLS FOR DEVELOPING CRITICAL THINKING AND ARGUMENTATIVE WRITING SKILLS IN ELT

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Abstract

Enhancing argumentative writing skills while fostering critical awareness is a primary objective in undergraduate English language education, particularly for students learning English as a second language. This study investigates the educational advantages of incorporating the graphic novel "The Witch Boy" by Molly Ostertag into the curriculum for first-year undergraduate English students at a Tier-2 college in Telangana, India. Utilizing a quasi-experimental design, the research compared a control group taught through traditional methods with an experimental group that engaged with the novel. Student writing was assessed through pre- and post-tests in four domains: organization, evidence and justification, content, and mechanics. The findings indicate that the experimental group demonstrated significantly greater improvement, especially in evidence-based reasoning and writing mechanics accuracy. Furthermore, classroom discussions regarding the narrative's depiction of gender roles facilitated critical engagement with broader social issues, underscoring the potential of multimodal texts to connect language instruction with students' real-life experiences. The results suggest that integrating socially relevant, multimodal materials into English language teaching can enhance academic literacy outcomes while fostering the development of critical, reflective learners in ESL contexts.

Keywords: graphic novels, argumentative writing, gender equity, Education for Sustainable Development (ESD), English Language Teaching (ELT)

1 Introduction

In the field of English Language Teaching (ELT), the cultivation of robust argumentative writing skills is crucial for enabling students to articulate logical and well-supported viewpoints with clarity. In the contemporary, globally interconnected, and information-centric world, argumentative writing serves not only as a medium of communication but also as a foundation for critical thinking, problem-solving, and persuasive discourse. These competencies are indispensable for students' academic and professional achievements, as they equip learners to navigate complex issues and articulate their perspectives with confidence. Hirvela argues that the importance of argumentation has been historically underestimated in second language (L2) writing research, despite its critical role in high-stakes assessments and academic writing formats. He advocates for a targeted approach to teaching argument structures, such as Toulmin's model, understanding the audience, and integrating reading and writing in L2 programs (Hirvela, 2017). From an instructional perspective, teaching students argumentative writing is inherently challenging, as it involves clarifying genre expectations, such as organizing claims and evidence, distinguishing between support and explanation, and ensuring that assessment aligns with instruction. In the context of South African higher education, Olsen, van Vuur, and Lombard advocate for a more explicit writing pedagogy that emphasizes these genre characteristics and supports disciplinary argumentation techniques. They highlight the difficulties students face in balancing content knowledge with rhetorical skills and propose a phased, explicit teaching approach to address these challenges (Olsen et

al., 2017). This perspective aligns with L2 writing research that underscores the importance of explicitly teaching argumentation and academic stance (Hirvela, 2017). Meta-analytic research links argument-focused practices with improvements in academic performance. In a quantitative review of 145 studies, Preiss et al. find that instructional methods and activities that engage students in creating, assessing, and communicating arguments lead to significant positive impacts on academic success, with more pronounced effects when students are tasked with writing arguments and when instruction explicitly targets argument quality (Preiss et al., 2013). These findings support curricular designs where argumentative writing serves not only as a literacy objective but also as a means for learning content. Argumentative writing also provides a valuable platform for exploring contentious social issues. Through a mixed-methods approach with pre- and post-measures and student reflections, Meral, Benzer, and Akgül demonstrate that structured argumentative writing tasks on controversial topics enhance students' critical thinking, perspective-taking, and openness to disagreement, while also fostering more sophisticated written arguments (Meral et al., 2022). Their research strengthens the case for incorporating social themes into writing instruction, provided that teachers offer clear scaffolding and opportunities for dialogue. Nevertheless, many students encounter difficulties in coherently presenting their ideas and providing pertinent justification, underscoring the necessity for innovative pedagogical strategies that render the writing process more interactive and engaging. In 2017, Peloghitis investigated the challenges faced by Japanese learners of English as a Foreign Language (EFL) in composing argumentative essays, identifying issues at both linguistic and discourse levels. By synthesizing previous research, he underscored the necessity of teaching strategies that integrate linguistic accuracy with instruction on structuring arguments, employing evidence, and cultivating critical thinking skills. Furthermore, he highlighted the importance of enhancing metacognitive awareness to facilitate revision and the management of coherence. While the development of argumentative writing skills is a crucial objective for ESL students, contemporary English language education should extend beyond merely enhancing language proficiency. Language classrooms have the potential to become dynamic spaces for the integration of broader educational objectives, such as fostering awareness of gender equity, in alignment with the goals of Education for Sustainable Development (ESD). By incorporating socially pertinent topics into writing lessons, students not only refine their ability to construct well-reasoned arguments but also augment their critical thinking, empathy, and engagement with complex societal issues.

In this context, Bekteshi and Xhaferi (2020) contend that the integration of Sustainable Development Goals (SDG) themes into English Language Teaching (ELT) encourages students to engage with global challenges while enhancing their language proficiency. Education for Sustainable Development (ESD) provides a dynamic framework for incorporating global issues, such as social justice, sustainability, and equality, into educational practice. A fundamental principle of ESD is the promotion of gender equality, as exemplified by Sustainable Development Goal 5 (Gender Equality) of the United Nations. By embedding ESD themes into ELT, educators can cultivate not only learners' language proficiency but also their ethical awareness and social responsibility. Addressing topics such as gender equity prompts learners to critically evaluate societal norms and challenge stereotypes, thereby fostering communicative competence and global citizenship.

Graphic novels, characterized by their integration of visual and textual storytelling, present a distinctive and accessible medium through which students can engage with Education for Sustainable Development (ESD) themes while enhancing their fundamental writing skills. Their narrative complexity and visual allure render them particularly effective in engaging a diverse range of learners, including those who may find conventional texts less

stimulating. Research suggests that graphic novels can enhance emotional engagement, foster deeper comprehension, and facilitate the analysis of intricate social themes. By offering thought-provoking narratives that challenge traditional gender roles, graphic novels such as "The Witch Boy" can serve as effective catalysts for critical discussions and argumentative writing within the English Language Teaching (ELT) classroom.

2 Literature Review

While contemporary research has highlighted the educational advantages of multimodal texts, such as graphic novels, in fostering student engagement, critical thinking, and reading comprehension, there is a notable paucity of studies that directly link these resources to the enhancement of argumentative writing within English Language Teaching (ELT) contexts. The extant literature encompasses various domains, exploring the influence of graphic novels on literacy and subject-specific learning, as well as investigating digital reading behaviors and the accessibility of visual narratives among diverse learner populations. However, there remains a limited understanding of the systematic incorporation of graphic novels into ELT classrooms to facilitate both skill development and the exploration of socially relevant themes, such as gender equity, as endorsed by Education for Sustainable Development (ESD). This review synthesizes existing research across these areas, underscoring the educational benefits, challenges, and underexplored connections between graphic novels, multimodal literacy, and critical thematic engagement. This synthesis provides the foundation for the present study's investigation into the use of "The Witch Boy" to enhance argumentative writing and promote gender equity awareness among undergraduate English learners.

Ferretti, Graham (2019) conducted an examination of the theoretical underpinnings of argumentative writing and its implications for pedagogical practices and assessment. Their study traces the development of argumentation from its origins in classical rhetoric to its integration into modern educational frameworks. They underscore that argumentative writing necessitates a dialogical process, wherein students present propositions substantiated by evidence while simultaneously addressing counterarguments. This inherently social aspect of argumentation underscores the necessity for instructional strategies that promote critical thinking and audience awareness. The authors further highlight the influence of sociocultural factors in shaping argumentative writing. Writing is conceptualized as a communicative tool that fortifies social relationships, with learners' engagement in social practices impacting their capacity to construct coherent arguments. For instance, participation in activities such as debates or critical discussions enhances reasoning skills. This perspective emphasizes the significance of incorporating culturally relevant materials, such as graphic novels, into writing instruction to render learning more meaningful and content-rich.

Cook, Kirchoff (2017) assert that graphic novels play a crucial role in promoting multiliteracies, particularly among college-level writers. Their qualitative study, conducted within a first-year composition course, demonstrates how students engaged profoundly with both the visual and textual components of the graphic novel *Persepolis*, employing it as a framework to explore their own identities and societal issues. The researchers argue that visual storytelling facilitates more nuanced understandings of complex topics such as culture, power, and marginalization. This perspective aligns with broader advocacy for multimodal approaches that extend beyond traditional text to encompass visual, spatial, and gestural forms of meaning-making.

Ferretti, Graham (2019) further advocate for evidence-based strategies, such as using Argumentation Venn Diagrams (AVDs), to scaffold students' understanding of argument structures. They argue that instructional tools combining visual and textual elements can

significantly enhance learners' ability to structure and evaluate arguments. These ideas align with the growing interest in multimodal texts like graphic novels, which offer rich narratives and visual cues to support argumentative writing. Their work lays the groundwork for exploring innovative approaches that align with contemporary educational goals.

In 2014, Cook conducted a quasi-experimental study to investigate the impact of graphic novels on reading comprehension among high school students. The study employed a graphic version of Poe's "The Cask of Amontillado" and compared three instructional methods: traditional teaching, instruction using graphic novels, and a combination of both. The findings revealed that students who engaged with the graphic novel, either as a supplement or a substitute for conventional texts, achieved significantly higher comprehension scores. The study also identified differences based on gender and grade level, with female students and those in higher grades performing better overall. Cook emphasized the potential of graphic novels to enhance differentiated learning and promote deeper engagement with texts, particularly when integrated with traditional teaching methods.

In a related study, Thompson, DiGeronimo (2014) investigated the role of graphic novels in business education, focusing on their efficacy in conveying complex concepts through a clear, visual medium. They argue that the multimodal nature of graphic novels supports learners who struggle with traditional texts by integrating visual storytelling with succinct language. The authors found that students demonstrated increased engagement and improved retention of business concepts when instructed using graphic novels. The study underscores the adaptability of graphic narratives across diverse disciplines and highlights their significance in promoting advanced cognitive skills and interdisciplinary literacy.

In their contribution to the field, Wang, Antonetti (2017) examined the relationship between digital reading habits and reading effectiveness. Although their research did not exclusively focus on graphic novels, it illuminated the evolving nature of literacy within digital contexts. The study found that students who frequently engaged with digital texts, including multimodal formats such as graphic novels, often exhibited greater confidence in reading and comprehending complex materials. However, the researchers cautioned that without appropriate scaffolding, digital reading might lead to superficial processing. Their findings underscore the importance of integrating multimodal resources in classrooms through careful instructional design to enhance comprehension and critical thinking.

Chun (2009) highlights the transformative potential of graphic novels, such as *Maus*, in developing critical literacies among English-language learners (ELLs). As multimodal texts, graphic novels blend visual and textual elements that resonate with learners from diverse linguistic and cultural backgrounds. Chun's study shows that visual narratives scaffold meaning, making language accessible while engaging learners with socio-political issues like racism and identity. This dual engagement fosters deeper reading comprehension and critical thinking. Chun also advocates for a "critical literacy toolkit," suggesting that graphic novels motivate learners to question the intersections between language, power, and identity. Activities based on *Maus* enabled learners to enhance reading and analytical skills while participating in discussions about systemic injustice, aligning with the multiliteracies framework, which values varied modes of communication and critical engagement.

Furthermore, Chun (2009) addresses the lack of adequate resources for ELLs in traditional classrooms and positions graphic novels as inclusive pedagogical tools. They enable learners to connect with complex social content while strengthening literacy skills, making a strong case for their integration into curriculum designs focused on cultural relevance and critical pedagogy. Supporting Chun's (2009) findings, Sun (2017) demonstrates how middle school learners developed critical thinking and peacebuilding skills through the use of graphic novels.

Öz, Efecioglu (2015), in their study “Graphic Novels: An Alternative Approach to Teach English as a Foreign Language,” investigated the effectiveness of graphic novels in EFL classrooms, focusing on International Baccalaureate students. Their findings indicate that graphic novels significantly enhance the comprehension of literary elements such as symbolism and foreshadowing, as well as inferential thinking and vocabulary acquisition. These visual texts help learners who struggle with traditional literary materials by providing contextual clues that improve understanding and engagement. Moreover, graphic novels were found to lower learners’ affective filters, reducing anxiety and increasing confidence, factors critical to language acquisition, aligning with Krashen’s Comprehension Hypothesis. However, the study also notes limitations, such as a reduced impact on analytical tasks like identifying cause-effect relationships, suggesting that graphic novels should be supplemented with other approaches for higher-order cognitive tasks. Öz and Efecioglu (2015) advocate blending graphic novels into syllabi to better meet the needs of modern, visually oriented learners. Schwarz (2002) highlights the ability of graphic novels to reach diverse and reluctant readers, making them valuable tools for inclusive instruction.

Domyancich-Lee et al. (2022) explored the role of graphic novels in social work education, emphasizing their capacity to engage “digital native” learners. The authors argue that graphic novels offer an effective medium for teaching critical thinking and social justice concepts by connecting students to lived human experiences. Through visual narratives, learners develop empathy and a deeper understanding of diversity and equity issues. Although focused on social work, their findings broadly apply to ELT, particularly for integrating social justice themes into literacy instruction. Graphic novels like *Safe Area Gorazde* and *Persepolis* illustrate how visual storytelling can illuminate historical and sociopolitical contexts, reinforcing the broader educational goal of preparing students for informed societal participation. Spangler (2010) praised Monnin’s (2010) practical strategies for implementing graphic novels in the classroom, reinforcing their pedagogical utility for secondary learners. Monnin (2010) provides clear pedagogical frameworks for using graphic novels in English instruction, including lesson planning and scaffolding techniques.

Carlson et al. (2022), in their study “Using Graphic Novels to Teach Diversity, Equity, Inclusion, and Social Justice: An Educational Technique,” examined the credibility of graphic novels as a means to facilitate discussions around diversity, equity, inclusion, and social justice. They argue that graphic novels encourage open dialogue and critical thinking about sensitive topics, fostering cultural competence and empathy. Their structured three-phase activity—including community building, silent reading and interpretation, and group discussions—provides learners a supportive environment to engage critically with the material. Activities emerging from scenarios, such as an athlete using a wheelchair, prompted significant conversations about implicit bias and systemic barriers. Carlson et al. (2022) conclude that graphic novels facilitate more meaningful discussions than traditional case studies, making them valuable additions to curricula focused on diversity and equity.

Yıldırım (n.d.), in “Using Graphic Novels in the Classroom,” examines the historical evolution and pedagogical implications of graphic novels in language education. Yıldırım highlights that graphic novels support knowledge construction and critical thinking, particularly for learners who struggle with traditional text-based resources. By integrating visuals with text, graphic novels appeal to visual learners and reluctant readers, reducing cognitive load during comprehension tasks. Yıldırım (n.d.) also emphasizes the versatility of graphic novels across genres, noting works like *Persepolis* and *Maus* for their ability to introduce complex sociopolitical themes effectively. The study calls for integrating global issues such as gender equity, environmental sustainability, and social justice into language curricula, advocating for holistic educational experiences.

Cordova (2024), in "Integrating Sustainable Development Goals in English Language and Literature Teaching," investigates the integration of SDGs into English language education at a state university laboratory school in the Philippines. The study demonstrates how integrating SDGs allows students to develop problem-solving skills, plan actions, and engage with real-world issues meaningfully. Pre-service teachers created contextually rich learning activities that fostered participatory attitudes among students, aligning language instruction with broader sustainable development objectives. Cordova (2024) contributes to the broader discussion on sustainable development by showing how the incorporation of SDGs into the curriculum empowers students to address societal challenges critically and purposefully. Similarly, Kwee (2021) explored how English language classrooms can serve as platforms for sustainable development, demonstrating the feasibility of integrating SDGs like gender equity into language instruction.

3 Problem Statement

Despite the increasing interest in multimodal literacy and the integration of visual texts within educational contexts, the utilization of graphic novels in English Language Teaching (ELT) has largely been limited to the enhancement of reading comprehension and literature appreciation. Research suggests that graphic novels can improve student motivation, visual engagement, and narrative comprehension. Nevertheless, there exists a substantial gap in investigating their potential to support argumentative writing, a crucial academic skill in language education. Traditional methods of teaching argumentative writing in ELT often depend on decontextualized prompts, rigid structures, and topics that lack personal or social relevance for learners. Consequently, many students face challenges in constructing meaningful arguments, effectively employing evidence, or critically engaging with complex social issues.

Furthermore, within the framework of Education for Sustainable Development (ESD), a global initiative supported by the United Nations Sustainable Development Goals (SDGs), language classrooms are increasingly recognised as environments for fostering critical thinking, empathy, and social responsibility. Despite this, there is a scarcity of research on how English Language Teaching (ELT) practices can effectively engage students with topics like gender equality (SDG 5) through the curriculum. In numerous contexts, particularly in semi-urban or resource-limited areas, there is a shortage of culturally relevant, age-appropriate, and engaging materials that enable learners to critically explore social justice issues while simultaneously enhancing essential language skills.

This research explores the potential utilization of "The Witch Boy," a graphic novel that challenges conventional gender roles through its engaging narrative and vivid illustrations, as an instructional tool in the English Language Teaching (ELT) classroom. It assesses whether this approach not only enhances students' proficiency in argumentative writing but also increases their awareness of gender equality, thereby aligning language education with broader educational and societal objectives. This is particularly significant for first-year undergraduate students, who are at a critical stage of their academic development and social consciousness.

Research Questions

1. How can graphic novels improve the argumentative writing skills of ESL learners?
2. How can graphic novels be used in English Language Teaching to promote gender equality?

Objectives

1. To investigate the impact of graphic novels on learners' proficiency in constructing persuasive arguments in writing.

2. The use of graphic novels as pedagogical tools to incorporate themes of Education for Sustainable Development (ESD), with a particular emphasis on gender equality, into English Language Teaching (ELT).

4 Methodology

This quantitative study examines the effectiveness of incorporating a graphic novel into English language instruction to improve undergraduate students' argumentative writing skills and increase their awareness of gender equity. The research was conducted with 100 first-year undergraduate students, aged 18 to 20, from a tier-2 college in Telangana, India. The majority of participants hailed from rural backgrounds and spoke various mother tongues. However, most had received English-medium instruction during their schooling and possessed a foundational understanding of essay writing.

Sampling Procedure and Ethical Considerations

Participants were selected through convenience sampling, as they were students enrolled in the researcher's English language classes. This method facilitated closer observation and enhanced monitoring during the intervention period. Although the institution lacks a formal Institutional Ethics Committee, participants were informed about the study's purpose, assured of the voluntary nature of their participation, and guaranteed that their responses would remain confidential and be used exclusively for academic purposes.

Study Design and Intervention

Following the ethical considerations, the study was structured to ensure equitable and effective participation of all selected students in the intervention. The sample was divided into two equal groups. The control group ($n = 50$) received instruction in argumentative writing through conventional pedagogical methods. In contrast, the experimental group ($n = 50$) engaged with 'The Witch Boy,' a graphic novel by Molly Ostertag, chosen for its thematic relevance and age appropriateness. The novel addresses issues related to gender roles and equity, aligning with the study's objectives.

An initial pre-test was administered to assess the argumentative writing skills of both groups, focusing on the topic "Does technology enhance or hinder human creativity?" The intervention for the experimental group extended over a two-week period and involved in-class reading sessions of the novel, accompanied by guided discussions on gender representation within the narrative. Participants were encouraged to analyze key narrative events, relate them to real-world social issues, and articulate their perspectives through structured argumentative writing tasks. Initially, these tasks required participants to respond to questions concerning the novel, necessitating critical thinking, justification of their reasoning, and logical expression of their ideas. Gradually, the focus of the questions transitioned from the graphic novel to topics pertinent to real-world issues. Additionally, they participated in guided classroom discussions centered on gender roles as depicted in "The Witch Boy." These discussions were intended to stimulate critical examination of the societal expectations imposed on characters and to foster reflection on broader issues of gender identity and equality. Thus, the involvement of the graphic novel as a tool could help them in enhancing their argumentative writing and promote the thought of gender equity. In contrast, the control group received instruction in argumentative writing and an introduction to the concept of gender equity through traditional pedagogical methods, such as lectures and textual explanations, without the incorporation of graphic literature.

Assessment and Data Collection

Data were collected through a writing assessment administered both prior to and following the intervention. The pre-test served to establish a baseline, ensuring that both groups exhibited comparable levels of writing proficiency at the outset. The pre-test and post-test

consisted of a structured argumentative essay task where students were required to write on the topic "Does technology enhance or hinder human creativity? adhering to a 500-word limit. This required them to present logical reasoning and substantiate their claims with evidence. The essays were evaluated using a standardized rubric, adapted from previous research, which encompassed four criteria: organization, evidence (justification of argument), content, and writing mechanics.

The post-test results were subsequently analyzed to evaluate the impact of instruction based on graphic novels. A quantitative analysis was conducted using a standardized rubric to assess learners' argumentative writing skills across four categories: organization, evidence/justification, content, and mechanics. The scores in each category, as well as the overall mean and total scores, were compared between the control and experimental groups. The experimental group engaged with "The Witch Boy," a graphic novel that examines gender roles and identity, while the control group received traditional instruction without the inclusion of graphic literature. To statistically compare the post-test results between the two groups, an independent samples t-test was performed, revealing a significant difference in performance favoring the experimental group. This comparative analysis sought to determine whether the integration of a multimodal text could significantly enhance learners' argumentative writing abilities.

5 Results

Pre-test: A preliminary assessment of argumentative essay writing skills was conducted prior to the intervention to evaluate the participants' existing capabilities. The results of this pre-test are presented in Table 1 and Table 2, which detail the performance of the control and experimental groups, respectively. Each rubric was evaluated on a four-point scale, with a maximum possible score of 16. Table 1 illustrates the average scores achieved by the control group across each rubric, while Table 2 presents the corresponding average scores for the experimental group.

Table 1: Pre-test performance of the control group

| Rubric | Mean | Std Dev |
|--------------|------|---------|
| Organisation | 1.94 | 0.93 |
| Evidence | 2.06 | 0.95 |
| Content | 2.2 | 1.06 |
| Mechanics | 2.42 | 1.05 |

Table 2: Pre-test performance of the experimental group

| Rubric | Mean | Std Dev |
|--------------|------|---------|
| Organisation | 1.98 | 0.86 |
| Evidence | 2.20 | 1.03 |
| Content | 2.26 | 1.02 |
| Mechanics | 2.06 | 1.05 |

Analysis of the pre-test performance indicates that both groups demonstrated equivalent levels of writing proficiency, thereby establishing a fair basis for comparison in the subsequent post-test analysis.

Post-Test: Subsequent to the intervention period, during which the experimental group received instruction in argumentative writing through the use of a graphic novel, while the control group was taught using traditional methods, a post-test was administered. Tables 3 and 4 display the post-test performance of both groups. The scores were subsequently compared, and an independent samples t-test was conducted to analyze the results.

Table 3: Post-test performance of the control group

| Rubric | Mean | Std Dev |
|--------------|------|---------|
| Organisation | 2.06 | 0.91 |
| Evidence | 2.22 | 0.88 |
| Content | 2.42 | 0.94 |
| Mechanics | 2.56 | 0.92 |

Table 4: Post-test performance of the experimental group

| Rubric | Mean | Std Dev |
|--------------|------|---------|
| Organisation | 2.18 | 0.66 |
| Evidence | 2.76 | 0.68 |
| Content | 2.44 | 0.81 |
| Mechanics | 2.54 | 0.50 |

The data indicate that the experimental group achieved higher scores than the control group in the post-test, particularly in the categories of evidence and mechanics. Figure 1 presents the comparative scores of each participant in both groups in the post-test.

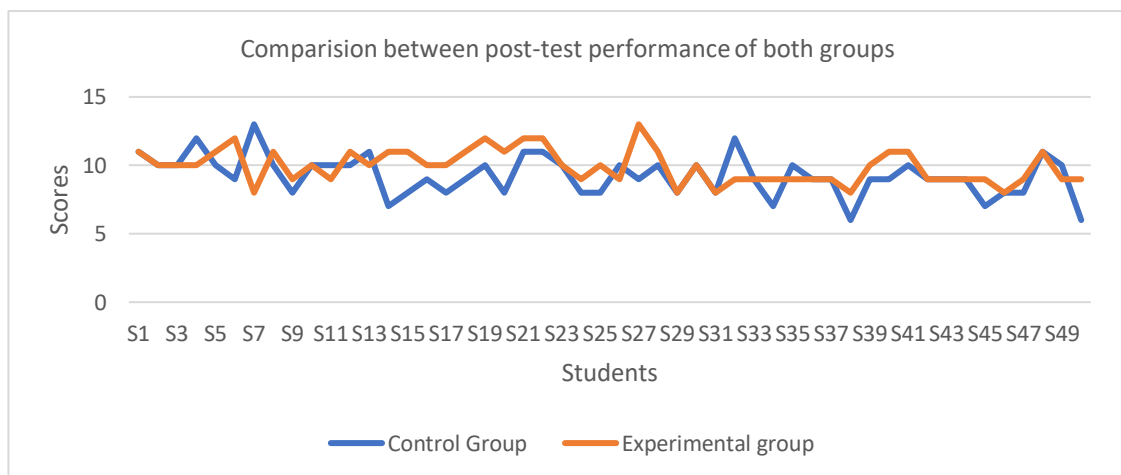


Figure 1: Post-test performance of both groups

Independent sample t-test

Table 5: Statistical comparison of post-test performance of both groups through an independent t-test

| Statistic | Value |
|--------------------------------|--------------|
| Mean (Control vs Experimental) | 9.26 vs 9.92 |
| t Stat | -2.44 |
| df (degrees of freedom) | 98 |
| P(T<=t) two-tail | 0.0165 |
| t Critical two-tail | 1.984 |

An independent samples t-test was conducted to compare the post-test writing scores of the control and experimental groups. The results indicated a statistically significant difference in mean scores between the control group ($M = 9.26$, $SD \approx 1.47$) and the experimental group ($M = 9.92$, $SD \approx 1.23$); $t(98) = -2.44$, $p = .016$ (two-tailed). These findings suggest that the experimental group, which received instruction through the graphic

novel 'The Witch Boy', outperformed the control group that received traditional instruction. The p-value of 0.016 (two-tailed) is less than the conventional threshold of 0.05, indicating statistical significance. In the post-test, the experimental group ($M = 9.92$) scored significantly higher than the control group ($M = 9.26$). Therefore, it can be concluded that the intervention using the graphic novel positively impacted argumentative writing performance..

6 Discussion

This study highlights the valuable role of graphic novels in enhancing argumentative writing skills and fostering awareness of gender equity among English language learners. The research addressed two key questions:

1. How can graphic novels improve the argumentative writing skills of ESL learners?
2. How can graphic novels be used in English Language Teaching to promote gender equality?

The findings reveal that the experimental group, which engaged with 'The Witch Boy,' demonstrated superior performance compared to the control group across all rubric categories, with particularly significant advancements in evidence/justification and mechanics. These results directly address Research Question 1, illustrating that the graphic novel offered learners a comprehensive, contextualized framework for developing arguments. The narrative structure and visual storytelling elements of 'The Witch Boy' facilitated students' ability to analyze complex social issues, synthesize information, and utilize textual evidence to substantiate their viewpoints. These outcomes suggest that the multimodal nature of graphic novels not only enhances comprehension but also fosters the higher-order thinking skills essential for effective argumentative writing.

Graphic novels have emerged as a potent pedagogical instrument for fostering critical thinking and ethical awareness among learners, particularly concerning Sustainable Development Goal 5 (Gender Equality). While SDG 5 primarily aims to eliminate discrimination and violence against women and girls, it also seeks to challenge the broader spectrum of gender-based stereotypes and inequalities. Graphic novels such as "The Witch Boy" by Molly Ostertag offer valuable narratives that question rigid gender expectations and allow readers to reflect on the impact of social norms on identity and self-expression. Although the protagonist is male, the novel encourages students to examine how gender roles are culturally constructed and reinforced, thereby facilitating discussions that align with the objectives of gender equity. Furthermore, other graphic novels, including "Persepolis" by Marjane Satrapi, "Pashmina" by Nidhi Chanani, and "Brazen" by Pénélope Bagieu, provide direct representations of women's struggles, agency, and empowerment across diverse contexts. These works offer rich, multimodal content that can assist educators in addressing gender issues in a manner that is accessible, engaging, and socially relevant. By integrating such texts into English language classrooms, educators can promote both language development and gender-sensitive education, thereby contributing to learners' global awareness and ethical literacy in alignment with SDG 5. As noted by O'Loughlin (2021), graphic novels can personalize the reading experience and enhance student motivation, particularly when learners identify with the themes portrayed.

The narrative of the novel, which depicts the challenges faced by Aster, a boy who challenges conventional gender roles by engaging in "witchcraft," a practice traditionally associated with women, provides a valuable context for learners to examine societal norms and contemplate the concept of equity. For instance, discussions within the experimental group focused on Aster's resilience in overcoming societal expectations, illustrating how rigid gender roles can constrain individual potential. By encouraging learners to engage in a thorough analysis of these themes and express their perspectives through argumentative

writing, the activity fostered critical thinking and academic development. Learners were able to construct well-reasoned arguments, drawing on examples from the narrative to substantiate their positions. For example, one learner contended that Aster's journey challenges the notion that certain skills or professions should be gender-specific, thereby advocating for the dismantling of stereotypes in real-world contexts.

In addressing Research Question 2, this study examined the utilization of graphic novels in English Language Teaching as a means to promote gender equality. The control group received instruction devoid of references to gender issues, whereas the experimental group engaged in guided classroom discussions centered on 'The Witch Boy,' a narrative that challenges traditional gender roles. These discussions prompted learners to reflect on societal expectations regarding masculinity and femininity, thereby enabling them to critically engage with the concept of gender equity. Although no formal assessment of gender awareness was conducted, classroom observations and student responses during writing tasks indicated an increasing sensitivity to the themes presented in the novel. By facilitating critical conversations and encouraging learners to question normative assumptions, the graphic novel acted as a catalyst for promoting ethical reflection and social awareness, which are essential components of Sustainable Development Goal 5 (Gender Equality). These findings highlight the potential of graphic novels to serve as both linguistic and ethical tools within the language classroom, supporting not only language development but also values-based education.

Incorporating 'The Witch Boy' into English Language Teaching, this study illustrates how education can function as a catalyst for both academic and social transformation. The novel's thematic depth allows learners to engage with core values of Education for Sustainable Development (ESD), such as equity, inclusion, and social justice, while concurrently enhancing their argumentative writing skills. As noted by Yu et al. (2024), empowering learners through sustainability-focused language instruction can cultivate critical awareness and global responsibility. This dual focus aligns with ESD's broader mission to develop informed, reflective, and empathetic global citizens capable of addressing real-world challenges. Furthermore, the success of this approach underscores the potential of graphic novels as effective tools for integrating ESD principles into language education, thereby bridging the gap between linguistic proficiency and critical social engagement.

In conclusion, this study underscores the significance of employing innovative pedagogical tools, such as graphic novels, in enhancing language proficiency and promoting gender equality awareness. It illustrates their pertinence in contemporary educational settings. This approach exemplifies the transformative potential of education in advancing the Sustainable Development Goals by equipping learners with the capacity for critical thinking, challenging societal norms, and articulating their perspectives with clarity and confidence.

7 Implications

For ELT Teachers and Curriculum Designers:

The findings underscore the potential of graphic novels as effective pedagogical tools in English Language Teaching (ELT). Educators can incorporate multimodal texts, such as "The Witch Boy," to enhance the engagement and relatability of argumentative writing instruction. Furthermore, the thematic depth of graphic novels can serve as an entry point for integrating social issues into the curriculum, thereby promoting both linguistic proficiency and critical thinking skills among learners.

For Policymakers:

This study highlights the significance of incorporating innovative, inclusive, and socially pertinent teaching materials to fulfill the dual objectives of skill development and values-based education. It is recommended that policymakers consider the integration of graphic

novels and similar resources into national curricula to more effectively align language education with the broader goals of sustainable development.

This study investigated the incorporation of "The Witch Boy," a graphic novel, into English Language Teaching (ELT) to enhance learners' argumentative writing skills and foster critical awareness of gender equity, consistent with the principles of Education for Sustainable Development (ESD). The findings indicated that the experimental group exposed to the graphic novel significantly outperformed the control group across all rubric categories, with notable improvements in evidence-based justification and mechanics. Furthermore, the narrative themes of the novel encouraged learners to critically analyze gender roles and challenge societal stereotypes, promoting a deeper understanding of equity and inclusivity. These results highlight the potential of graphic novels to simultaneously enhance academic skills and promote sustainable development values in educational contexts.

In light of the findings, it is recommended that educators integrate graphic novels into the English Language Teaching (ELT) curriculum as an innovative pedagogical tool for instructing argumentative writing. The multimodal format and rich narratives of graphic novels provide learners with an accessible and engaging medium for cultivating critical thinking, constructing coherent arguments, and effectively utilizing evidence. Educators can further augment the learning experience by employing guided discussions and structured writing prompts, which facilitate students' analysis of the themes within these texts and their connection to real-world social issues.

This study underscores the significance of incorporating Education for Sustainable Development (ESD) themes, such as gender equity, into language instruction. By aligning writing tasks with sustainable development topics, educators can simultaneously address linguistic objectives and global citizenship education. It is strongly recommended that policymakers and curriculum designers consider the inclusion of socially relevant materials, such as graphic novels, within English Language Teaching (ELT) programs to effectively bridge the gap between skills development and value-based education.

8 Limitations

While the findings of this study are promising, it is important to acknowledge several limitations. The sample size of 100 students, although adequate for an initial analysis, restricts the generalizability of the results to broader populations. Furthermore, the intervention was conducted over a relatively short duration, which may not fully capture the long-term effects of employing graphic novels in English Language Teaching (ELT). Additionally, variations in learners' prior exposure to graphic novels or their familiarity with themes of gender equity may have influenced the outcomes.

Furthermore, this study did not utilize a structured instrument to assess students' awareness or attitudes toward gender equality before and after the intervention. Although classroom discussions offered valuable, informal insights into students' evolving perspectives, the lack of a formal assessment constrains the ability to draw definitive conclusions regarding the novel's impact on learners' comprehension of Sustainable Development Goal 5 (Gender Equality). Future research could incorporate reflective writing tasks, thematic content analysis, or pre/post-intervention surveys to more accurately evaluate changes in gender equity awareness resulting from the use of socially relevant graphic novels.

9 Future Research

Future research should address the limitations identified in this study by conducting longitudinal investigations to examine the sustained impact of graphic novels on both the development of writing skills and the promotion of critical social awareness. Expanding the

sample size and including participants from diverse educational and cultural backgrounds could yield deeper insights into the broader applicability of this approach. Furthermore, researchers could explore the use of other graphic novels that engage with themes related to sustainability, such as environmental issues or social justice, to evaluate their effectiveness across various Education for Sustainable Development (ESD) goals. Investigating the role of teacher training in the effective integration of graphic novels into English Language Teaching (ELT) classrooms could also provide valuable perspectives on best practices for implementation.

10 Conclusion

In an increasingly complex and interconnected world, education must evolve to equip students not only with linguistic proficiency but also with critical thinking and ethical understanding. This study demonstrates that graphic novels serve as an effective medium for achieving these objectives, enhancing students' argumentative writing skills while fostering critical engagement with social issues such as gender equity. The integration of multimodal texts like "The Witch Boy" into English Language Teaching (ELT) can bridge the gap between traditional skill development and values-based education, preparing learners to engage thoughtfully and responsibly in global conversations. The strategic adoption of such innovative pedagogical tools will be essential in aligning language education with the broader mission of the Sustainable Development Goals. The incorporation of graphic novels in ELT signifies a substantial shift in pedagogical approaches, addressing the evolving needs of students in a complex global landscape. By incorporating multimodal texts like "The Witch Boy," educators can simultaneously enhance language skills and promote critical thinking on pressing social issues. This approach not only improves students' argumentative writing abilities but also encourages them to engage deeply with concepts of gender equity and other societal challenges. The visual and textual elements of graphic novels provide a rich context for language learners, allowing them to develop nuanced understandings of both linguistic structures and cultural narratives.

Moreover, this innovative pedagogical approach is closely aligned with the objectives of the Sustainable Development Goals, particularly in promoting quality education and gender equality. By introducing students to diverse perspectives through graphic novels, educators can foster a more inclusive and empathetic worldview among learners. This method transcends traditional language instruction, equipping students to become active and thoughtful participants in global dialogues. As education systems worldwide endeavor to keep pace with rapid societal changes, the integration of such multimodal texts in English Language Teaching (ELT) curricula presents a promising avenue for developing well-rounded, critically aware, and linguistically proficient individuals capable of navigating the complexities of our interconnected world.

References

- Bekteshi E and Xhaferi B (2020) Learning about sustainable development goals through English language teaching. *Research in Social Sciences and Technology* 5(3): 78–94.
- Carlson LM, Edwards B and Nakajima MA (2022) Using graphic novels to teach diversity, equity, inclusion and social justice: An educational technique. *Athletic Training Education Journal* 17(4): 262–269. <https://doi.org/10.4085/1947-380x-22-009>
- Chun CW (2009) Critical literacies and graphic novels for English-language learners: Teaching Maus. *Journal of Adolescent & Adult Literacy* 53(2): 14–18. <https://doi.org/10.1598/JAAL.53.2.2>
- Cordova M (2024) Integrating sustainable development goals in English language and

- literature teaching. *Frontiers in Education* 9. <https://doi.org/10.3389/feduc.2024.1330034>
- Cook, M. P., & Kirchoff, J. S. (2017). Teaching multimodal literacy through reading and writing graphic novels. *Language and literacy*, 19(4), 76-95.
- Cook, M. P. (2014). Reading graphically: Examining the effects of graphic novels on the reading comprehension of high school students (Doctoral dissertation, Clemson University).
- Domyancich-Lee SC, Cleeland LR and McCleary JS (2022) Teaching note—Comics in the classroom: Teaching with graphic novels. *Journal of Social Work Education* 58(3): 579–585. <https://doi.org/10.1080/10437797.2021.1942353>
- Ferretti RP and Graham S (2019) Argumentative writing: Theory, assessment and instruction. *Reading and Writing* 32(6): 1345–1357. <https://doi.org/10.1007/s11145-019-09950-x>
- Gorman M (2003) Getting graphic! Using graphic novels to promote literacy with preteens and teens. Worthington, OH: Linworth.
- Kwee CTT (2021) I want to teach sustainable development in my English classroom: A case study incorporating sustainable development goals into English teaching. *Sustainability* 13(8): 4195. <https://doi.org/10.3390/su13084195>
- Monnin K (2010) Teaching graphic novels: Practical strategies for the secondary ELA classroom. Gainesville, FL: Maupin House Publishing.
- O'Loughlin HA (2021) Teaching YA graphic novels: Personalizing the teaching of secondary reading with visual texts. *English Leadership Quarterly* 43(3): 13–18.
- Ortlieb, E., Sargent, S., & Moreland, M. (2014). Evaluating the Efficacy of Using a Digital Reading Environment to Improve Reading Comprehension within a Reading Clinic. *Reading Psychology*, 35(5), 397–421. <https://doi.org/10.1080/02702711.2012.683236>
- Short, J. C., Randolph-Seng, B., & McKenny, A. F. (2013). Graphic presentation: An empirical examination of the graphic novel approach to communicate business concepts. *Business Communication Quarterly*, 76(3), 273-303.
- Schwarz GE (2002a) Graphic books for diverse needs: Engaging reluctant and curious readers. *ALAN Review* 3(1): 54–57.
- Spangler S (2010) Review of Teaching graphic novels, by Katie Monnin. Available at: <https://core.ac.uk/download/20047021.pdf> (accessed [insert access date]).
- Sun L (2017) Critical encounters in a middle school English language arts classroom: Using graphic novels to teach critical thinking and reading for peace education. *Multicultural Education* 25(1): 22–28.
- Teaching note—Comics in the classroom: Teaching with graphic novels (n.d.) Available at: <https://experts.umn.edu/en/publications/teaching-notecomics-in-the-classroom-teaching-with-graphic-novels>.
- Yu B, Guo WY and Fu H (2024) Sustainability in English language teaching: Strategies for empowering students to achieve sustainable development goals. *Sustainability* 16(8): 3325. <https://doi.org/10.3390/su16083325>
- Öz H and Efecioglu E (2015) Graphic novels: An alternative approach to teach English as a foreign language. *Journal of Language and Linguistic Studies* 11(1): 1–10. Available at: www.jlls.org.
- Preiss, D. D., Castillo, J. C., Grigorenko, E. L., & Manzi, J. (2013). Argumentative writing and academic achievement: A longitudinal study. *Learning and Individual Differences*, 28, 204-211.
- Peloghitis, J. (2017). Difficulties and strategies in argumentative writing: A qualitative analysis. *Transformation in language education*. JALT.
- Hirvela, A. (2017). Argumentation & second language writing: Are we missing the boat?. *Journal of Second Language Writing*, 36, 69-74.
- Meral, E., Kayaalp, F., & Namlı, Z. B. (2022). The role of argumentative writing in teaching

controversial issues: a mixed methods research. *International Journal of Contemporary Educational Research*, 9(1), 143-163.

Dornbrack, J., & Dixon, K. (2014). Towards a more explicit writing pedagogy: The complexity of teaching argumentative writing. *Reading & Writing-Journal of the Reading Association of South Africa*, 5(1), 1-8.

Hirvela, A. (2017). Argumentation & second language writing. *Journal of Second Language Writing*, advance online publication.