Enhancing Functional Writing Skills and Reducing Writing Apprehension in FCI Graduates through an E-Blog-Based ESP Program

المستخلص

هدفت هذه الدراسة إلى فحص فعالية برنامج متخصص في تدريس اللغة الإنجليزية للأغراض المهنية باستخدام المدونات الإلكترونية، وذلك لتطوير مهارات الكتابة الوظيفية والحد من قلق الكتابة لدى حديثى التخرج من كلية الحاسبات والمعلومات بجامعة أسيوط. يواجه الخريجون في المجالات التكنولوجية تحديات كبيرة في الكتابة المهنية، والتي تُعد مهارة أساسية للنجاح الوظيفي. اعتمدت الدراسة على التصميم شبه التجريبي ذي المجموعة الواحدة مع اختبار قبلي وبعدي، حيث بدأت بتحليل احتياجات المشاركين الذي كشف عن ضعف في مهارات الكتابة الوظيفية ومستويات عالية من قلق الكتابة. تم تنفيذ برنامج تدريبي لمدة 12 أسبوعاً ركز على مهام كتابية حقيقية متعلقة بالأعمال (التقارير والرسائل الإلكترونية والرسائل التجارية) من خلال منصة للمدونات الإلكترونية. أظهرت النتائج بعد التدخل تحسناً إحصائياً في مهارات الكتابة الوظيفية للمشاركين، بالإضافة إلى انخفاض كبير في مستوى قلق الكتابة. كما تم اكتشاف علاقة ارتباط سلبية قوية بين التحسن في مهارات الكتابة والانخفاض في مستوى القلق. تشير هذه النتائج إلى أن المدونات الإلكترونية توفر منصة قيمة وفعالة لتدريس اللغة الإنجليزية للأغراض المهنية، حيث تتيح ممارسة أصيلة وتسهل التغذية الراجعة البناءة وتبني ثقة المتعلمين في بيئة تعاونية داعمة عبر الإنترنت. تناقش الدراسة التطبيقات العملية لتصميم مناهج اللغة الإنجليزية للأغراض المهنية ودمج التكنولوجيا في تعليم اللغة للمهنيين في مجال التكنولوجيا.

Abstract

This study investigated an e-blog-based English for Specific Purposes (ESP) program's effectiveness in developing functional writing skills and reducing writing apprehension among recent graduates of the Faculty of Computers & Information (FCI) at Assiut University. Graduates in technological fields often face significant challenges in professional writing, a critical competency for career success. Employing a one-group pre-test/post-test quasi-experimental design, the study first conducted a needs analysis, which revealed participants' low proficiency in

functional writing and high levels of writing apprehension. A 12-week ESP program was subsequently implemented, focusing on authentic, business-related writing tasks (reports, emails, and business letters) facilitated through an e-blogging platform. Post-intervention results revealed statistically significant improvements in participants' functional writing skills and a concurrent significant reduction in writing apprehension. A strong negative correlation was found between the gains in writing skills and the reduction in apprehension. These findings suggest that e-blogs offer a valuable and effective platform for ESP instruction, enabling authentic practice, facilitating constructive feedback, and building learner confidence in a supportive, collaborative online environment. The study discusses implications for ESP curriculum design and the integration of technology in language education for technology professionals.

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1. Introduction

In the contemporary globalized technological environment, English language proficiency—particularly in professional writing contexts—is a critical competency for computer science and information technology graduates. As the lingua franca of international business and technology, English writing skills directly impact graduates' employability, professional advancement, and ability to participate effectively in global technological discourse (Cheng, 2016; Riemer, 2007). Despite the technical expertise developed during their academic studies, many graduates from the Faculty of Computers and Information (FCI) encounter significant

challenges when tasked with producing functional written communication in professional contexts (Al-Khasawneh, 2010).

Functional writing skills, defined as the ability to produce clear and purposeful written communication for specific professional contexts and audiences, are essential for IT professionals as they routinely engage in email correspondence, technical documentation, business proposals, and various report formats (Evans, 2012). However, research indicates a persistent gap between the writing competencies developed during undergraduate IT education and the demands of industry (Kassim & Ali, 2010; Wu & Chin, 2010).

This psychological dimension compounds technical writing challenges, creating a significant obstacle to effective professional communication. As Zhang (2011) noted, writing apprehension can severely impede an individual's willingness to engage in written communication, thereby limiting their professional performance and advancement opportunities.

English for Specific Purposes (ESP) approaches offer a promising pathway for addressing these challenges by tailoring language instruction to the specific professional needs and contexts of learners. Simultaneously, the emergence of Web 2.0 technologies has revolutionized writing instruction by creating collaborative platforms that can transform traditionally solitary writing activities into interactive, socially constructed learning experiences (Warschauer & Grimes, 2007).

E-blogs, for instance, present unique affordances for writing instruction. They facilitate authentic audience engagement and provide collaborative feedback mechanisms along with multimodal composing opportunities (Richardson, 2010; Sun, 2010). As Ahmed (2016) observes, blog-based writing activities can promote

authentic task engagement while simultaneously reducing affective barriers to writing.

However, limited research has examined the integration of e-blogs within ESP frameworks for IT professionals, particularly in addressing functional writing development and writing apprehension among FCI graduates in the Egyptian context. This research gap is significant given the growing importance of the Egyptian IT sector and its increasing integration with global technology markets. This study addresses this gap by investigating the effectiveness of an e-blog-based ESP program designed for FCI graduates at Assiut University. The research examines whether such an approach can significantly enhance graduates' functional writing skills while simultaneously reducing their writing apprehension.

2. Literature Review
2.1 English for Specific Purposes (ESP) and IT Education

ESP emerged in the 1960s as a distinctive approach to language teaching, defined by its focus on learners' specific professional or academic needs (Hutchinson & Waters, 1987). ESP differs from general English instruction in its rigorous analysis of particular discourse communities and the linguistic demands they impose on participants (Belcher, 2009).

In IT education, ESP approaches are increasingly recognized as essential components of professional preparation. Riemer (2007) emphasized that technical expertise alone is insufficient for professional success in technology fields and that communicative competence is equally crucial. Kassim and Ali (2010) identified written communication—particularly email, reports, and documentation—as among the most critical professional skills required by employers in technical fields.

Researchers like Wu and Chin (2010) have documented the specific genres IT professionals routinely engage with, including technical reports, project proposals, and various forms of business correspondence. These findings underscore the necessity for tailored ESP programs that prepare IT graduates for the authentic communicative demands they will encounter (Cheng, 2016).

ESP pedagogy is fundamentally learner-centered, emphasizing authentic materials, task-based learning, and collaboration between language and content specialists. Effective ESP programs begin with a comprehensive needs analysis that investigates target situations, current proficiencies, and professional contexts (Long, 2005). According to Basturkmen (2010), ESP course design follows a systematic process: (1) analyzing target needs, (2) investigating specialist discourse, (3) developing learning objectives, (4) selecting and adapting materials, (5) creating assessment procedures, and (6) evaluating program effectiveness.

The integration of digital technologies has transformed ESP pedagogy. Arnó-Macià (2012) highlights how technology-enhanced ESP can facilitate authentic communication and autonomous learning. Digital tools like corpus analysis software and collaborative platforms enable learners to engage with authentic language in meaningful contexts (Boulton & Cobb, 2017). Assessment in ESP presents unique challenges, as it must evaluate both language proficiency and professional communication competence. Douglas (2013) argues for ESP tests that replicate target language use situations, incorporating authentic tasks and criteria derived from professional standards. Consequently, performance-based assessment approaches have proven particularly effective (Knoch & Mcnamara, 2015).

2.2 Functional Writing for Professional Contexts

Functional writing encompasses purposeful, audience-directed communication designed to achieve specific objectives within professional contexts (Evans, 2012). Unlike academic writing, functional writing prioritizes clarity, efficiency, and actionable outcomes (Flowerdew, 2013). For IT professionals, these competencies span diverse genres, each with distinctive structures, styles, and lexical features that must be mastered (Bhatia, 2014). Research consistently indicates that functional writing represents a significant challenge for many graduates entering technical professions, who often struggle to transition from academic writing models to the concise, action-oriented communication required in industry (Bhattacharyya, 2013; Kaewpet, 2009).

Developing functional writing skills requires targeted pedagogical approaches addressing both linguistic and rhetorical dimensions of professional communication. Genre-based pedagogy has emerged as a particularly effective approach in ESP contexts (Hyland, 2007). This approach involves explicit analysis of exemplary texts, identification of rhetorical moves and linguistic features, scaffolded practice, and critical reflection on genre conventions.

Task-based learning also offers valuable frameworks for functional writing development. Ellis (2003) advocates for writing tasks that simulate authentic workplace situations, allowing learners to engage with realistic communicative challenges while receiving structured guidance and feedback. Research by Hafner (2013) demonstrates that authentic task design increases motivation, genre awareness, and transfer of skills to professional contexts.

Process approaches to writing instruction remain valuable in ESP contexts when adapted to professional writing scenarios. Badger and White's (2000) process-genre approach integrates awareness of text purpose and structure with systematic attention to planning, drafting, and revision. This integrated approach acknowledges both the social dimensions of writing and the cognitive processes involved in text production.

Flowerdew (2015) emphasizes the importance of corpus-informed instruction for developing functional writing skills in specialized domains. Corpora of authentic professional texts can help identify lexicogrammatical patterns, specialized collocations, and rhetorical structures characteristic of target genres, enabling more precise and targeted instruction.

2.3 Writing Apprehension in EFL Contexts

Writing apprehension, first conceptualized by Daly and Miller (1975), refers to the anxiety, fear, or avoidance associated with writing tasks, which significantly impacts performance and career trajectory. Research indicates that writing apprehension is a persistent challenge in EFL contexts, often attributed to linguistic insecurity, fear of evaluation, and previous negative experiences (Al-Sawalha & Chow, 2012; Zhang, 2011). Apprehensive writers typically produce shorter texts, engage in less extensive planning, and employ simpler syntactic structures, severely constraining the effectiveness of their professional communication (Erkan & Saban, 2011). Addressing this requires instructional approaches that combine skill development with affective support, such as collaborative environments and authentic tasks (Cheng, 2002).

2.4 Sources of Writing Apprehension

Writing apprehension is a multifaceted phenomenon influenced by various interrelated factors. The primary sources and triggers can be delineated as follows:

I.   **Fear of Evaluation and Criticism:** It is considered a significant contributor to writing anxiety as students often experience apprehension stemming from the perceived negative judgments of both instructors and peers (Cheng, 2004; Juday et al., 2024). Such fear can be manifested as a concern about potential ridicule or punitive feedback (Helwa, 2015).

II. **Lack of Linguistic Knowledge and Perceived Competence:** Many students report heightened anxiety levels due to a perceived deficiency in linguistic skills, including vocabulary, grammar, syntax, spelling, and punctuation. This self-assessment of inadequate language competence—regardless of its accuracy—can exacerbate feelings of apprehension (Ali et al., 2024).

III. **Instructional Practices:** Traditional pedagogical approaches that prioritize formal aspects of writing—such as grammar and mechanical correctness—over the development of meaning and ideas can inadvertently heighten anxiety levels (Thiel et al., 2015).

IV. **Time Constraints:** The pressure of writing within stringent time limits frequently serves as a trigger for anxiety. Students may experience cognitive overload, leading to disorganized thoughts, physical manifestations of nervousness, and overall discomfort during the writing process (Mohammed et al., 2020).

V. **Lack of Practice:** A deficit in regular writing opportunities can result in elevated anxiety levels. Students who have not engaged in sufficient practice may find themselves struggling to generate ideas or confront their mistakes, fostering a reluctance to write (Salem, 2007).

VI. **Topic Choice and Idea Generation:** The assignment of topics rather than the opportunity to choose can provoke significant anxiety. Difficulties in idea generation and organization can further exacerbate this anxiety, as students may feel overwhelmed (Dashtestani & Stojković, 2016).

VII. **Low Self-Esteem and Self-Efficacy:** There exists a strong correlation between low self-esteem regarding one's writing abilities and writing apprehension. This phenomenon can lead to a "comparison deficiency," wherein students perceive their writing as inferior compared to an idealized standard of what their work should represent (Ayodele & Akinlana, 2012).

VIII. **Social Comparisons:** The public comparison of student writing can invoke feelings of embarrassment and inadequacy, thereby heightening anxiety levels related to writing tasks (Cheng, 2004, p. 320).

IX. **Cognitive Demands of Writing:** The intricate nature of writing requires the simultaneous execution of various cognitive processes, including the encoding of meaning, attention to grammatical accuracy, vocabulary selection, and the establishment of coherence. This complexity can be daunting for many writers, contributing to anxiety (Helwa, 2015).

In sum, writing apprehension arises from a confluence of psychological, educational, and cognitive factors, each playing a pivotal role in the overall experience of the student writer. Understanding these sources is essential for

developing effective strategies to mitigate writing anxiety and enhance student writing performance.

2.5 E-Blogs as Educational Tools

Web 2.0 technologies, particularly e-blogs, have transformed writing instruction by supporting collaborative learning, authentic audience engagement, and multimodal communication (Warschauer & Grimes, 2007). E-blogs provide publishing platforms for authentic audiences (Richardson, 2010), support comment-based peer feedback (Sun, 2010), and enable the creation of communities of practice (Ducate & Lomicka, 2008). Previous research has documented numerous benefits, including enhanced student motivation (Campbell, 2003) and improved writing performance (Arslan & Şahin-Kızıl, 2010). Several studies have also found that blog-based activities significantly reduce writing anxiety by creating supportive communities and lowering the perceived finality of writing products (Amir et al., 2011; Lin et al., 2014).

2.6 The Role of E-Blogs and Related Technologies in Language Learning

E-blogs and various web technologies have profoundly transformed language learning and instruction, particularly in the realm of writing, by offering dynamic, interactive, and authentic environments that extend beyond traditional classroom settings (Vurdien, 2012).The increasing awareness of technology's role in teaching writing has led to the development of numerous technology-based applications. These advancements have spurred a "third methodological movement," combining quantitative and qualitative approaches to understand the phenomenon more comprehensively. Web 2.0 technologies, such as blogs, wikis, and forums, are recognized as effective educational tools. Blogs, in particular, have evolved from

simple online diaries to sophisticated educational platforms, offering features like chronological posting, integration of text, images, and hyperlinks, and the ability to comment. Other vital web technologies include social networking services (SNS), online discussion forums, computer-mediated communication (CMC) tools, and various e-learning strategies (Muslem et al., 2024).

E-blogs, often referred to as e-blogs or simply blogs, are essentially online journals that users can continuously update. They function as a virtual space for writing, editing, and managing textual information that can be immediately and publicly available online via web browsers (Saha, 2023b). E-blogs proved to have numerous characteristics including a) personal diary format resembling a personal diary, where individuals recount experiences and events, fostering an arena for self-expression and creativity; b) dynamic and chronological content in which blog posts are typically arranged in reverse chronological order, with the most recent entries displayed first, encouraging frequent updates; c) interactive and collaborative as they allow for two-way communication, enable connections to other bloggers, establish peer-group relationships, and provide a sense of audience, which can motivate students to write well - not to mention comments sections that allow readers to post reactions and engage in discussions, forming "threads" of conversation; d) multimedia capabilities where blogs can incorporate text, images, audio-video files, and hyperlinks to related websites, enriching the learning experience; e) user-friendly design as their set template and design make blogging an appealing, intuitive, and effortless system for both teachers and students to learn, requiring minimum technical knowledge; f) last but not least, blogs are a powerful communication tool and an electronic forum where teachers and students can express views, discuss ideas, and exchange information- additionally they facilitate communication not restrained by location or distance (Juniari et al., 2022). Beyond

writing skills, blogs help develop critical digital literacy, rhetorical, functional, and critical—that are essential in contemporary professional contexts (Bloch, 2007).

2.7 Gaps in Literature

While existing research provides valuable insights, a review of the literature reveals several gaps. There is limited research on the specific functional writing needs of Egyptian FCI graduates and on the relationship between writing apprehension and performance in this demographic. Furthermore, research on e-blog integration in ESP has primarily focused on academic rather than professional writing. The current study aims to address these gaps by investigating an e-blog-based ESP program's effectiveness in simultaneously improving functional writing skills and reducing writing apprehension among FCI graduates in Assiut.

3. Methodology
3.1 Research Questions
1. What is the effect of a suggested e-blog-based ESP program on developing functional writing skills among FCI graduates?
2. What is the effect of a suggested e-blog-based ESP program on reducing writing apprehension among FCI graduates?
3. What is the relationship between the development of functional writing skills and the reduction of writing apprehension among participants?

3.2 Research Design

This study employed a quasi-experimental, one-group pre-test/post-test design. This design was selected as it is appropriate for specialized professional contexts where randomized control groups are often impractical, a common approach in ESP research (Dudley-Evans & St. John, 1998).

3.3 Participants

The study included 28 recent graduates (17 male, 11 female) from the Faculty of Computers and Information at Assiut University, aged 22 to 24 (Mean age = 22.7). The sample size, while modest, was determined by the enrollment capacity of the specialized professional development program under investigation. All participants were enrolled in this program at the Information Technology Institute. Their undergraduate English instruction had focused on general proficiency and technical terminology rather than functional writing. A standardized placement test indicated their proficiency as intermediate (B1-B2 CEFR). Participation was voluntary, and written informed consent was obtained from all individuals before the study commenced.

3.4 Instruments

- **Needs Analysis Questionnaire:** A 25-item questionnaire was developed to identify participants' demographic profiles, prior writing experiences, and perceived professional writing needs. The reliability for this instrument was established with a Cronbach's alpha coefficient of .84.

- **Functional Writing Skills Test:** This test assessed participants' ability to produce three key professional documents: a business email, a technical report, and a business letter. The test was validated by a panel of seven experts. To ensure scoring consistency, two independent scorers were trained on the assessment rubric. Inter-rater reliability yielded a Cohen's kappa coefficient of 0.81, indicating substantial agreement.

- **Writing Apprehension Test (WAT):** A modified 26-item version of Daly and Miller's (1975) WAT was adapted for the IT professional context. The instrument demonstrated high internal consistency (Cronbach's α = .88).

- **E-Blog Engagement Metrics:** Quantitative and qualitative data on platform engagement (e.g., frequency of posts, word count, comment exchanges) were collected to provide additional insight into participant activity.

3.5 Intervention: The E-Blog-Based ESP Program

A 12-week ESP program was developed based on the learning-centered models of Hutchinson and Waters (1987) and Dudley-Evans and St. John (1998). The program followed a blended learning approach, combining three weekly 2-hour face-to-face sessions with continuous online engagement on a customized WordPress platform. The curriculum was structured into three modules, each focused on a specific genre: Business Emails (4 weeks), Technical Reports (5 weeks), and Business Letters (3 weeks). Each module included genre analysis, guided practice, e-blog publication with peer feedback, and required revision cycles.

3.6 Data Collection and Analysis

Data were collected via pre- and post-intervention administrations of the functional writing skills test and the WAT. Data analysis involved descriptive and inferential statistics. Paired-samples t-tests were used to compare pre-test and post-test scores, with Cohen's d calculated to determine effect sizes. The relationship between changes in writing skills and apprehension was examined using Pearson correlation analysis. A multiple regression analysis was also conducted to explore the predictive power of writing apprehension changes on functional writing improvement.

4. Results

4.1 Functional Writing Skills Development

The first research question investigated the program's effect on functional writing skills. A paired-samples t-test indicated that post-test scores on the functional writing

test were significantly higher than pre-test scores. The overall mean score (out of 100) increased from 62.43 to 78.96 ($t(27) = 15.27, p < .001$), an improvement associated with a very large effect size ($d = 2.08$). As shown in Table 1, significant improvements with large effect sizes were observed across all three genres.

Table 1

Comparison of Pre-test and Post-test Scores on Functional Writing Skills Test

Writing Skill Area	Pre-test Mean (SD)	Post-test Mean (SD)	Mean Difference	t-value	p-value	Cohen's d
Overall Score	62.43 (8.71)	78.96 (7.14)	16.53	15.27	.000*	2.08
Business Emails	65.21 (9.38)	82.43 (6.92)	17.22	13.84	.000*	2.11
Technical Reports	58.75 (10.24)	75.86 (8.76)	17.11	12.93	.000*	1.83
Business Letters	63.32 (9.17)	78.61 (7.85)	15.29	11.76	.000*	1.79

Further analysis of skill dimensions (Table 2) revealed significant gains across all aspects, with the most substantial improvements in organization (d = 2.06) and vocabulary appropriateness (d = 1.95).

Table 2
Comparison of Pre-test and Post-test Scores on Functional Writing Skill Dimensions

Skill Dimension	Pre-test Mean (SD)	Post-test Mean (SD)	Mean Difference	t-value	p-value	Cohen's d
Task Achievement	63.75 (9.84)	80.46 (8.03)	16.71	12.83	.000*	1.87
Organization	61.32 (10.21)	79.89 (7.56)	18.57	14.23	.000*	2.06
Language Accuracy	59.68 (8.76)	73.21 (8.42)	13.53	10.84	.000*	1.57
Vocabulary Appropriateness	65.89 (9.32)	82.14 (7.25)	16.25	13.68	.000*	1.95

Skill Dimension	Pre-test Mean (SD)	Post-test Mean (SD)	Mean Difference	t-value	p-value	Cohen's d
Formatting Conventions	61.54 (11.26)	79.11 (8.73)	17.57	12.37	.000*	1.75

*Note: N = 28, * p < .001*

4.2 Writing Apprehension Reduction

The second research question examined the program's effect on writing apprehension. As shown in Table 3, there was a statistically significant reduction in overall writing apprehension. The mean WAT score decreased by 18.75 points, from 87.32 to 68.57 ($t(27) = 14.32, p < .001$), with a large effect size ($d = 1.59$). Significant reductions with large effect sizes were observed across all components, with the largest drop in writing avoidance behaviors ($d = 1.68$).

Table 3

Comparison of Pre-test and Post-test Scores on Writing Apprehension Test

WAT Component	Pre-test Mean (SD)	Post-test Mean (SD)	Mean Difference	t-value	p-value	Cohen's d
Overall WAT Score	87.32 (12.76)	68.57 (10.83)	-18.75	14.32	.000*	1.59
Writing Avoidance	89.64 (13.25)	69.21 (11.46)	-20.43	15.76	.000*	1.68
Writing Anxiety	90.18 (14.37)	70.54 (12.18)	-19.64	14.83	.000*	1.49
Writing Self-Efficacy	82.14 (13.41)	65.96 (11.27)	-16.18	12.93	.000*	1.32

Note: $N = 28$, * $p < .001$. Lower scores indicate reduced apprehension.

As detailed in Table 4, apprehension related to specific genres also decreased significantly, with the most substantial reduction seen for technical reports ($d = 1.58$).

Table 4
Comparison of Genre-Specific Writing Apprehension Before and After Intervention

Genre-Specific Apprehension	Pre-test Mean (SD)	Post-test Mean (SD)	Mean Difference	t-value	p-value	Cohen's d
Business Email Apprehension	83.25 (13.84)	65.71 (10.56)	-17.54	13.28	.000*	1.43
Technical Report Apprehension	92.86 (14.57)	71.32 (12.83)	-21.54	16.43	.000*	1.58
Business Letter Apprehension	85.86 (13.25)	68.68 (11.74)	-17.18	13.76	.000*	1.38

*Note: N = 28, * p < .001. Lower scores indicate reduced apprehension.*

4.3 Relationship Between Writing Skills and Apprehension

The third research question investigated the relationship between the two key variables. Pearson correlation analysis revealed a significant, strong negative correlation between the change in overall functional writing scores and the change

in overall WAT scores ($r = -.72$, $p < .01$). This indicates that as participants' writing skills improved, their writing apprehension decreased. The strongest relationship was found between the improvement in technical report writing and the reduction in writing anxiety ($r = -.75$, $p < .01$).

A multiple regression analysis was conducted to assess if changes in apprehension could predict gains in writing skills. The model was statistically significant ($F(3, 24) = 18.76$, $p < .001$) and accounted for 63.4% of the variance in functional writing improvement ($R^2 = .634$). The change in writing anxiety emerged as the strongest significant predictor ($\beta = -.42$, $p < .01$), followed by writing avoidance ($\beta = -.28$, $p < .05$).

5. Discussion

The findings of this study suggest a significant positive impact of an e-blog-based ESP program on both the functional writing skills and the psychological disposition of recent IT graduates. The substantial improvement in functional writing scores ($d = 2.08$) confirms the effectiveness of the intervention. This aligns with prior research highlighting the value of ESP programs that are closely tailored to learners' professional needs (Cheng, 2016; Dudley-Evans & St. John, 1998). The e-blog platform appears to have been a key component, providing an authentic context for practice that mirrors modern digital workplaces and facilitates the development of specific genres like business emails and technical reports (Richardson, 2010; Sun, 2010).

Concurrently, the program led to a significant reduction in writing apprehension ($d = 1.59$), supporting the work of researchers who advocate for collaborative and technology-mediated writing environments to address affective barriers (Amir et al.,

2011; Zhang, 2011). The e-blog's features—such as peer-to-peer feedback, the ability to revise work before wider publication, and the creation of a supportive community—likely contributed to a less threatening writing environment, which in turn reduced anxiety and avoidance behaviors. The largest drop in apprehension was related to technical reports, initially the most daunting genre for participants. This suggests that repeated, structured exposure and successful practice can demystify complex tasks and build confidence.

The strong negative correlation between skill improvement and apprehension reduction ($r = -.72$) is a key finding. It suggests a virtuous cycle: as learners' skills improved through practice and feedback, their confidence grew and anxiety lessened, which likely made them more willing to engage further in writing tasks, leading to more improvement. The regression analysis, which identified reduced anxiety as the strongest predictor of skill gains, reinforces this interpretation. This finding empirically supports the pedagogical principle that addressing both cognitive skills and affective factors is crucial for effective writing instruction (Cheng, 2004).

Despite the promising findings, several limitations must be acknowledged. The quasi-experimental design, while appropriate for the context, lacks a control group, which limits the ability to make definitive causal claims. The relatively small sample size (N=28), dictated by the program's enrollment, may affect the generalizability of the results to a wider population of IT graduates. Future research should aim to replicate these findings with larger, more diverse samples and employ a control group to strengthen causal inferences. Additionally, the study relied on self-report measures for writing apprehension, which may be subject to social desirability bias.

6. Conclusion and Implications

This study provides compelling evidence that an ESP program integrating e-blogs can be a highly effective method for enhancing the professional communication skills of IT graduates. The intervention successfully improved participants' abilities in specific, job-relevant writing genres and significantly lowered their writing apprehension.

The implications for pedagogy and curriculum design are clear. First, ESP programs for technical professionals should move beyond traditional grammar and vocabulary instruction to focus on authentic, genre-based functional writing tasks. Second, the integration of Web 2.0 tools like e-blogs constitutes a powerful pedagogical strategy rather than merely a technological novelty. E-blogs can create an immersive, interactive, and less intimidating learning environment that fosters both skill acquisition and confidence (Warschauer & Grimes, 2007). Finally, writing instructors, particularly in EFL/ESP contexts, must recognize and actively address the psychological dimension of writing apprehension.

While the results are promising, the study's limitations highlight avenues for future research. Nonetheless, this study provides a robust model for developing modern, effective writing instruction tailored to the needs of 21st-century technology professionals.

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