

Integrating Daoist Educational Philosophy into English Writing Pedagogy: A Periodic Progressive Classroom Instruction in Writing Skills (PPCIWS) Model for Engineering Students

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ABSTRACT

Effective English writing has become an essential competency for engineering graduates in academic and professional contexts. However, many engineering students, particularly English as Second Language (ESL) learners, face persistent challenges in producing coherent, grammatically accurate, and professionally appropriate written texts. Conventional writing instruction often emphasizes product-oriented outcomes, offering limited opportunities for progressive learning, reflective practice, and learner autonomy. Addressing this gap, the present study proposes the Periodic Progressive Classroom Instruction in Writing Skills (PPCIWS) model, interpreted through the principles of Daoist educational philosophy, including ziran (natural progression), wu wei (facilitative teaching), reflective learning, and harmonious learner development.

A quasi-experimental pre-test–post-test research design was employed with 60 final-year engineering students at Aditya University, Andhra Pradesh, India. The six-week intervention comprised six sequential instructional modules: Foundation Writing Skills, Paragraph Writing, Individual Writing Tasks, Process Writing, Technical Writing, and Creative and Reflective Writing. Students' writing proficiency was assessed through structured questionnaires and classroom-based writing evaluations conducted before and after the intervention.

The findings revealed a significant improvement in students' writing performance. The proportion of high-performing students increased from 14% in the pre-test to 46% in the post-test, while low-performing learners declined from 28% to 4%. Students also demonstrated enhanced grammatical accuracy, vocabulary usage, and coherence, organization of ideas, confidence, and technical writing competence. The PPCIWS framework promoted learner autonomy, reflective practice, and continuous improvement through progressive classroom instruction.

The study concludes that integrating Daoist educational philosophy with progressive writing pedagogy provides an innovative, learner-centered framework for enhancing English writing proficiency among engineering students, offering valuable implications for English Language Teaching (ELT), English for Specific Purposes (ESP), and higher education.

Keywords: *Daoist Educational Philosophy; Periodic Progressive Classroom Instruction in Writing Skills (PPCIWS); English Writing Skills; Engineering Education; English Language Teaching (ELT); English for Specific Purposes (ESP); Learner-Centered Pedagogy; Technical Writing; Writing Proficiency; Progressive Learning.*

I. INTRODUCTION

In the twenty-first century, effective written communication has become an indispensable competency for engineering graduates, complementing their technical knowledge and professional expertise. Global industries increasingly expect engineers to communicate complex technical concepts through reports, project documentation, research papers, professional correspondence, and collaborative digital platforms. Consequently, English writing proficiency has emerged as a critical employability skill in higher education. However, many engineering students, particularly those learning English as a Second Language (ESL), encounter persistent challenges in producing coherent, grammatically accurate, and contextually appropriate written texts. Limited vocabulary, inadequate grammatical competence, poor organization of ideas, and insufficient opportunities for guided writing practice often hinder their academic performance and professional readiness.

Traditional approaches to writing instruction primarily emphasize linguistic accuracy and product-oriented assessment, frequently overlooking the gradual cognitive and reflective processes involved in developing writing competence. Contemporary language pedagogy, however, advocates learner-centered instructional approaches that encourage continuous practice, constructive feedback, collaboration, and reflective learning. Progressive instructional models have demonstrated considerable potential in enabling students to develop writing proficiency through systematic classroom engagement rather than isolated writing exercises.

An educational philosophy that strongly complements these learner-centered principles is **Daoist educational philosophy**. Rooted in the teachings of *Laozi* and *Zhuangzi*, Daoist thought views learning as a natural, continuous, and harmonious process that unfolds through experience, observation, reflection, and self-cultivation rather than rigid instruction. Central to Daoist pedagogy are the principles of *ziran* (natural development), *wu wei* (non-coercive facilitation), balance, and harmony. These principles encourage teachers to guide learners progressively while allowing knowledge and skills to evolve through meaningful engagement and sustained practice. Such an educational perspective aligns closely with contemporary constructivist approaches to language learning that emphasize learner autonomy, reflective thinking, and gradual competence development.

Within English Language Teaching (ELT), the integration of philosophical perspectives into writing pedagogy remains relatively underexplored, particularly in technical education. Although several instructional approaches have focused on grammar, process writing, communicative competence, and task-based learning, few studies have proposed a structured pedagogical framework that combines progressive classroom instruction with a holistic educational philosophy to enhance writing proficiency among engineering students. This gap highlights the need for an instructional model that systematically develops writing competence while simultaneously fostering learner confidence, reflection, and independent learning.

To address this need, the present study proposes the **Periodic Progressive Classroom Instruction in Writing Skills (PPCIWS)** model. The model adopts a structured six-module instructional framework that progressively develops writing proficiency through Foundation Writing Skills, Paragraph Writing, Individual Writing Tasks, Process Writing, Technical Writing, and Creative and Reflective Writing. Rather than viewing writing as a single outcome, PPCIWS conceptualizes writing development as a continuous process of incremental learning supported by regular classroom practice, formative assessment, constructive feedback, and reflective improvement. Interpreted through the lens of Daoist educational philosophy, the model encourages natural progression, learner-centered engagement, balanced instructional practices, and continuous self-development.

The study employs a quasi-experimental pre-test–post-test design to evaluate the effectiveness of the PPCIWS model among engineering students. Specifically, it investigates whether a progressively structured instructional framework grounded in Daoist educational principles can significantly improve students' grammatical accuracy, vocabulary usage, and coherence, and confidence, and overall English writing proficiency. The findings are expected to contribute to English Language Teaching (ELT), English for Specific Purposes (ESP), and engineering education by presenting an innovative pedagogical framework that integrates philosophical insight with classroom-based instructional practice to strengthen written communication skills among technical learners.

II. LITERATURE REVIEW

2.1 English Writing Skills in Technical Education

English writing proficiency has become an indispensable component of technical education, enabling engineering graduates to communicate scientific knowledge, prepare technical documentation, publish research findings, and collaborate effectively in multicultural professional environments. While technical competence remains fundamental, employers increasingly recognize written communication as a critical employability skill. Consequently, higher education institutions have placed greater emphasis on developing students' academic and professional writing abilities.

Despite this recognition, many engineering students continue to experience considerable challenges in English writing. Common difficulties include grammatical inaccuracies, inadequate vocabulary, weak sentence construction, poor coherence, limited critical thinking, and ineffective organization of ideas. These challenges are particularly evident among English as a Second Language (ESL) learner, whose exposure to authentic writing

opportunities is often restricted. Previous research has consistently demonstrated that systematic instruction, continuous practice, constructive feedback, and learner-centered pedagogical approaches significantly improve writing proficiency and academic performance.

Contemporary writing pedagogy has gradually shifted from product-oriented instruction toward process-oriented learning. Process writing emphasizes planning, drafting, revising, editing, and reflection as interconnected stages of writing development. Such an approach encourages learners to view writing as a continuous cognitive process rather than merely producing a final product. This pedagogical transition provides an important foundation for progressive instructional models designed to strengthen writing competence through sustained classroom engagement.

2.2 Daoist Educational Philosophy and Language Learning

Daoist educational philosophy, originating from the classical works of Laozi (*Dao De Jing*) and Zhuangzi, presents education as a lifelong process of natural growth, self-discovery, and harmonious development. Rather than emphasizing rigid instruction or excessive external control, Daoist thought advocates facilitating learning through experience, observation, reflection, and gradual cultivation of individual potential.

One of the central concepts of Daoism is **ziran** (自然), often translated as "naturalness" or "natural development." In educational contexts, *ziran* encourages learning that progresses according to learners' cognitive readiness rather than through forced memorization or excessive teacher intervention. Closely related is the principle of **wu wei** (無為), meaning "effortless action" or "non-coercive facilitation." Rather than passive inactivity, *wu wei* encourages educators to create supportive learning environments in which students actively construct knowledge through meaningful engagement while teachers serve primarily as facilitators of learning.

Daoism also emphasizes harmony, balance, and continuous self-cultivation. Learning is viewed not merely as the acquisition of information but as an on-going process of intellectual, emotional, and ethical development. Reflection, adaptability, patience, and learner autonomy are therefore regarded as essential characteristics of effective education. These principles closely correspond with contemporary learner-centered pedagogies, particularly in second-language acquisition, where gradual progression, authentic communication, and reflective practice contribute significantly to language development.

2.3 Theoretical Foundations of the PPCIWS Model

The Periodic Progressive Classroom Instruction in Writing Skills (PPCIWS) model integrates established theories of language acquisition with the educational principles of Daoist philosophy to create a comprehensive framework for developing English writing proficiency among engineering students.

Vygotsky's Social Constructivist Theory emphasizes collaborative learning and the Zone of Proximal Development, highlighting the importance of guided interaction in cognitive growth. Swain's Output Hypothesis argues that language production enables learners to recognize linguistic limitations and refine their communicative competence. Krashen's theory of comprehensible input further suggests that language acquisition occurs when learners receive meaningful and appropriately challenging input supported by opportunities for authentic language use.

Bandura's Social Cognitive Theory highlights self-efficacy, observation, and self-regulation as essential components of successful learning, while Hymes' concept of Communicative Competence extends language learning beyond grammatical accuracy to include appropriate language use within diverse communicative contexts. Cummins' distinction between Basic Interpersonal Communicative Skills (BICS) and Cognitive Academic Language Proficiency (CALP) further emphasizes the importance of developing advanced academic writing skills necessary for higher education and professional communication.

Within the PPCIWS framework, these contemporary theories are complemented by Daoist educational principles. The six instructional modules are designed to promote gradual progression (*ziran*), learner-centered facilitation (*wu wei*), reflective improvement, and balanced cognitive development. Consequently, writing competence is developed progressively through continuous classroom practice, formative assessment, constructive feedback, collaborative learning, and self-reflection rather than through isolated instructional activities.

2.4 Research Gap

Although numerous studies have examined English writing instruction, process writing, task-based learning, and communicative language teaching, relatively few have proposed a structured instructional framework specifically designed for engineering students that simultaneously integrates progressive classroom instruction with philosophical principles of learning. Existing research generally emphasizes either linguistic competence or pedagogical techniques without considering holistic educational philosophies that promote sustained learner development.

Furthermore, limited research has explored the educational relevance of Daoist philosophy within English Language Teaching, particularly in technical education. The principles of natural progression, learner autonomy, reflective practice, and harmonious development provide valuable pedagogical insights that remain largely underutilized in writing instruction.

To address this gap, the present study proposes the **Periodic Progressive Classroom Instruction in Writing Skills (PPCIWS)** model as an innovative pedagogical framework. By integrating Daoist educational philosophy with contemporary language-learning theories, the study offers a learner-centered and progressively structured approach for enhancing English writing proficiency among engineering students.

III. CONCEPTUAL FRAMEWORK OF THE PPCIWS MODEL

The **Periodic Progressive Classroom Instruction in Writing Skills (PPCIWS)** model is designed as a structured pedagogical framework to enhance English writing proficiency among engineering students through systematic, progressive, and learner-centered classroom instruction. Unlike conventional writing instruction, which often focuses primarily on the final written product, the PPCIWS model emphasizes continuous learning, regular practice, formative feedback, reflection, and gradual skill development. The framework draws upon established theories of second-language acquisition while being interpreted through the principles of **Daoist educational philosophy**, which advocate natural progression, harmony, learner autonomy, and reflective self-cultivation.

The conceptual foundation of the PPCIWS model is based on the understanding that writing proficiency develops progressively through sustained classroom engagement rather than isolated instructional activities. The model consists of **six sequential instructional modules**, each addressing a specific dimension of writing development while collectively promoting higher levels of linguistic competence and communicative effectiveness.



Fig- 1

Module 1: Foundation Writing Skills

The first module establishes the fundamental components of English writing, including grammar, sentence construction, vocabulary development, punctuation, and sentence accuracy. Students acquire the linguistic foundations necessary for effective written communication through guided classroom practice and continuous feedback. This stage reflects the Daoist principle of **ziran** (natural development), allowing learners to build competence gradually before progressing to more complex writing tasks.

Module 2: Paragraph Writing

The second module focuses on organizing ideas into coherent paragraphs using topic sentences, supporting details, logical sequencing, and cohesive devices. Students learn to develop unity and coherence while expressing ideas clearly and systematically. The gradual organization of ideas mirrors the Daoist concept of balance and harmony, where each component contributes naturally to the overall structure.

Module 3: Individual Writing Tasks

This module encourages students to apply previously acquired writing skills independently through short compositions, descriptive writing, summaries, letters, and other individual assignments. The objective is to develop confidence, creativity, and learner autonomy. Consistent with the Daoist principle of **wu wei**, the teacher functions as a facilitator who guides rather than dominates the learning process, enabling students to develop writing competence through meaningful practice.

Module 4: Process Writing

Writing is presented as a recursive process involving planning, drafting, revising, editing, and proofreading. Students continuously refine their work based on formative feedback from instructors and peers. Reflection and self-assessment become essential components of learning, reinforcing the Daoist emphasis on continuous self-cultivation and intellectual growth.

Module 5: Technical Writing

Engineering students require discipline-specific writing skills that extend beyond general language proficiency. This module introduces professional writing genres such as laboratory reports, project documentation, technical descriptions, proposals, emails, and research summaries. Students learn to communicate technical knowledge with clarity, precision, coherence, and professional accuracy. The integration of language competence with technical expertise reflects the Daoist principle of achieving harmony between knowledge and practical application.

Module 6: Creative and Reflective Writing

The final instructional module encourages students to engage in reflective journals, essays, opinion writing, creative compositions, and analytical responses. These activities strengthen higher-order thinking, creativity, critical reflection, and self-expression while consolidating the writing competencies developed throughout the previous modules. Continuous reflection enables learners to recognize their progress and cultivate independent learning habits consistent with Daoist educational philosophy.

Integration of Daoist Educational Principles with the PPCIWS Model

The PPCIWS framework reflects several fundamental Daoist educational principles that support progressive language learning. Rather than emphasizing memorization or examination-oriented instruction, the model promotes natural learning through sustained classroom participation, learner autonomy, reflective practice, and gradual cognitive development.

Daoist Educational Principle Application in PPCIWS

Table-1

Ziran (Natural Development)	Writing skills progress gradually from basic grammar to advanced technical and creative writing through six sequential modules.
Wu Wei (Facilitative Teaching)	The instructor acts as a guide by providing continuous support, feedback, and opportunities for independent learning rather than imposing rigid instruction
Harmony and Balance	Equal emphasis is placed on grammatical accuracy, organization of ideas, creativity, technical writing, and learner confidence
Self-Cultivation	Students develop writing competence through continuous classroom practice, revision, reflection, and self-assessment.
Reflective Learning	Regular formative assessment and feedback encourage learners to identify weaknesses and progressively improve their writing performance.

The conceptual relationship among Daoist educational philosophy, progressive classroom instruction, and writing proficiency is illustrated as follows:

The framework demonstrates that writing proficiency is not achieved through isolated classroom activities but through continuous, structured, and reflective learning experiences. By integrating Daoist educational philosophy with progressive instructional practices, the PPCIWS model offers a holistic pedagogical framework that supports sustainable language development and prepares engineering students for effective academic and professional communication.

IV. RESEARCH METHODOLOGY

4.1 Research Design

The present study employed a **quasi-experimental pre-test-post-test research design** to evaluate the effectiveness of the **Periodic Progressive Classroom Instruction in Writing Skills (PPCIWS)** model in enhancing the English writing proficiency of engineering students. The study was conducted over a period of **six weeks (30 instructional hours)** using a structured classroom intervention. The pedagogical implementation was interpreted through the principles of **Daoist educational philosophy**, particularly *ziran* (natural progression), *wu wei* (facilitative teaching), reflective learning, and harmonious learner development. These principles complemented the progressive instructional framework by encouraging gradual skill acquisition, learner autonomy, and continuous classroom engagement.

4.2 Research Objectives

The study was guided by the following objectives:

1. To identify the writing difficulties experienced by engineering students learning English as a Second Language (ESL).
2. To develop and implement the Periodic Progressive Classroom Instruction in Writing Skills (PPCIWS) model.
3. To evaluate the effectiveness of the PPCIWS model in improving English writing proficiency among engineering students.
4. To examine the relevance of Daoist educational philosophy in supporting progressive classroom instruction and learner-centered writing pedagogy.

4.3 Research Questions

The investigation sought to answer the following research questions:

RQ1: What are the major writing difficulties encountered by engineering students?

RQ2: Does the PPCIWS model significantly improve students' English writing proficiency?

RQ3: Which components of writing show the greatest improvement after the implementation of PPCIWS?

RQ4: How can Daoist educational principles strengthen progressive writing instruction in technical education?

4.4 Participants

The study was conducted among **60 final-year engineering students** from **Aditya University, Surampalem, and Andhra Pradesh, India**. The participants represented different engineering disciplines and possessed varying levels of English language proficiency. English was studied as a second language by all participants.

Prior to the intervention, students completed a diagnostic writing assessment and a structured questionnaire to determine their existing writing proficiency.

4.5 Research Instrument

A structured questionnaire consisting of **nine items** was administered before and after the intervention. The questionnaire assessed various dimensions of English writing proficiency, including:

- sentence construction
- grammatical accuracy
- vocabulary usage
- organization of ideas
- paragraph development
- report writing
- writing confidence
- regular writing practice
- writing anxiety

The questionnaire was supplemented by classroom writing tasks and continuous teacher observations throughout the intervention period.

4.6 The PPCIWS Intervention

The instructional programme consisted of **six progressive classroom modules**, delivered over **30 instructional hours**.

LIST OF WRITING MODULES

Table-2

MODULE	FOCUS AREA	Hours per week
MODULE 1	Foundation Writing Skills	5
MODULE 2	Paragraph Writing	5
MODULE 3	Individual Writing Tasks	5
MODULE 4	Process Writing	5
MODULE 5	Technical Writing	5
MODULE 6	Creative and Reflective Writing	5
		30

Each instructional module gradually increased the complexity of writing tasks while providing regular classroom practice, constructive feedback, collaborative learning opportunities, peer interaction, revision activities, and reflective writing exercises.

The instructional sequence reflected the Daoist principle of **natural progression**, allowing students to advance systematically from basic linguistic competence toward independent academic and professional writing.

4.7 Data Analysis

The collected data were analysed using descriptive statistical techniques. Students' performances in the pre-test and post-test were compared using frequencies and percentages to determine improvements in writing proficiency across the four performance groups.

The analysis focused on improvements in:

- grammatical accuracy
- vocabulary usage
- organization of ideas
- coherence
- writing confidence
- technical writing competence

The findings were presented through tables and graphical representations to illustrate the effectiveness of the PPCIWS model.

4.8 Ethical Considerations

Participation in the study was voluntary. Students were informed about the objectives of the research before data collection, and confidentiality of individual responses was maintained throughout the study. The collected data were used exclusively for academic research purposes.

V. RESULTS

5.1 Pre-test Analysis

Prior to the implementation of the Periodic Progressive Classroom Instruction in Writing Skills (PPCIWS) model, all participants completed a diagnostic writing assessment to determine their initial level of English writing proficiency. Based on their performance, the students were classified into four proficiency groups according to the predetermined assessment criteria.

Table 3: Pre-test Distribution of Students

NO OF STUDENTS	GROUP	Marks	Percentage
13	A	70above	14
17	B	55 to 69	30
15	C	40 to 54	28
15	D	less than 40	28

The pre-test results indicate that only **13 students (14%)** demonstrated a high level of writing proficiency (Group A), whereas **30%** of the participants belonged to Group B. A considerable proportion of students (**56%**) were classified under Groups C and D, indicating limited writing competence prior to the intervention. The findings suggest that many engineering students experienced difficulties in grammatical accuracy, vocabulary usage, organization of ideas, coherence, and confidence in English writing.

5.2 Implementation of the PPCIWS Model

Following the pre-test, the PPCIWS instructional framework was implemented over a period of **six weeks (30 instructional hours)**. The intervention comprised six progressive instructional modules:

- Foundation Writing Skills
- Paragraph Writing
- Individual Writing Tasks
- Process Writing
- Technical Writing

- Creative and Reflective Writing

Each instructional module was designed to facilitate gradual improvement through classroom practice, peer interaction, instructor feedback, revision, and reflective learning. Consistent with Daoist educational principles, the instructional process emphasized natural progression, learner autonomy, continuous improvement, and balanced cognitive development.

5.3 Post-test Analysis

After completing the instructional programme, the participants were reassessed using the same evaluation criteria.

Table 4: Post-test Analysis

NO OF STUDENTS	GROUP	Marks	Percentage
28	A	70above	46
16	B	55 to 69	29
14	C	40 to 54	21
2	D	less than 40	4

The post-test results demonstrate a substantial improvement in students' English writing proficiency following the implementation of the PPCIWS model. The proportion of students in the highest proficiency category (Group A) increased from **14%** to **46%**, indicating a significant improvement in overall writing performance.

Similarly, the number of students in the lowest proficiency category (Group D) decreased from **28%** to **4%**, suggesting that most low-performing learners successfully progressed to higher proficiency levels. These findings indicate that the structured and progressive instructional model effectively enhanced students' writing competence.

5.4 Comparative Analysis of Pre-test and Post-test Performance

Table 5: Comparison of Pre-test and Post-test Results

GROUP	Pre test	Percentage	Post test	percentage
A	13	14	28	46
B	17	30	16	29
C	15	28	14	21
D	15	28	2	4

A comparison of the pre-test and post-test results clearly demonstrates positive movement across the four proficiency groups. The most notable improvement occurred in **Group A**, which recorded an increase of **32 percentage points** following the intervention. At the same time, the proportion of students in **Group D** declined by **24 percentage points**, reflecting a considerable reduction in low writing proficiency.

The slight decrease observed in Groups B and C indicates that many students progressed into the highest proficiency group after completing the PPCIWS programme. Overall, the distribution of students shifted from lower proficiency categories toward higher levels of writing competence, demonstrating the effectiveness of the progressive instructional framework.

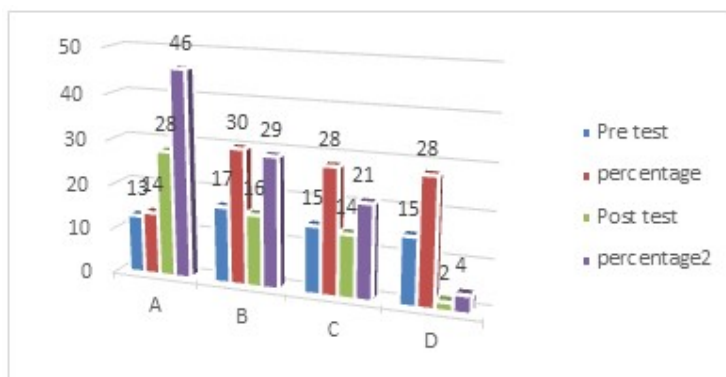


Fig-2

5.5 Improvement in Writing Competencies

The classroom observations, writing assessments, and post-intervention questionnaire revealed noticeable improvements across multiple dimensions of English writing proficiency. Students demonstrated greater ability to:

- construct grammatically accurate sentences;
- use a wider range of vocabulary appropriately;
- organize ideas logically within paragraphs;
- develop coherent and cohesive written texts;
- prepare technical reports and professional documents;
- express ideas with greater confidence and clarity; and
- revise and refine written work through reflective practice.

These improvements indicate that the PPCIWS model supported not only linguistic development but also higher-order writing skills required for academic and professional communication.

5.6 Student Perceptions of the PPCIWS Model

The post-intervention questionnaire further revealed highly positive student perceptions of the instructional framework. Approximately **97%** of the participants reported that the PPCIWS model contributed positively to the development of their English writing skills. Students indicated that the progressive sequence of instructional modules, continuous classroom practice, regular feedback, and reflective learning activities enhanced their confidence and motivation to write in English.

The findings also suggest that learner-centered instructional practices, interpreted through Daoist educational principles of gradual development, harmony, and reflective learning, created a supportive classroom environment that encouraged sustained participation and continuous improvement.

SUMMARY OF FINDINGS

The findings of the study demonstrate that the PPCIWS model effectively improved English writing proficiency among engineering students. The intervention produced measurable gains in writing performance, particularly among students with initially low proficiency levels. The progressive instructional sequence, combined with continuous assessment, formative feedback, and learner-centered classroom practices, enabled students to develop grammatical accuracy, coherence, vocabulary usage, technical writing competence, and confidence in written communication. These results provide empirical support for the effectiveness of the PPCIWS framework as a structured pedagogical model for English writing instruction in technical education.

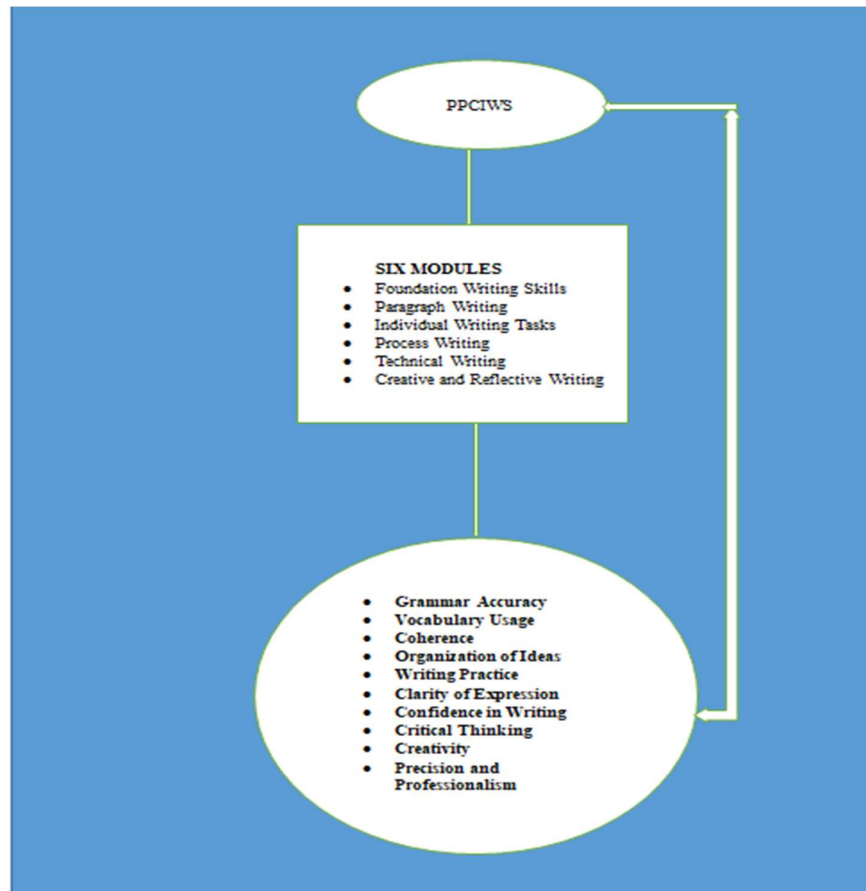


Fig-3

VI. DISCUSSION

The findings of the present study demonstrate that the **Periodic Progressive Classroom Instruction in Writing Skills (PPCIWS)** model significantly enhanced the English writing proficiency of engineering students. The improvement observed in the post-test, particularly the increase in the proportion of high-performing students from **14% to 46%** and the reduction of low-performing students from **28% to 4%**, indicates that a structured and progressive instructional framework can effectively address the writing challenges commonly experienced by English as a Second Language (ESL) learners. These findings support the view that writing competence develops through systematic practice, continuous feedback, and learner engagement rather than through isolated grammar instruction or examination-oriented learning.

The success of the PPCIWS model can be understood through the principles of **Daoist educational philosophy**, which emphasize natural growth (*ziran*), facilitative teaching (*wu wei*), harmony, and continuous self-cultivation. Rather than expecting immediate mastery, the six instructional modules guided students through a gradual progression from foundational writing skills to technical and reflective writing. This sequential development allowed learners to consolidate each stage of learning before advancing to more complex writing tasks. Such gradual progression reflects the Daoist belief that meaningful learning occurs through sustained experience and continuous practice rather than through excessive external pressure.

The instructional role adopted in the PPCIWS framework also reflects the Daoist principle of **wu wei**, in which the teacher acts primarily as a facilitator of learning rather than as the sole transmitter of knowledge. Throughout the intervention, students were encouraged to participate actively in writing tasks, peer discussions, revisions, and reflective activities while receiving constructive feedback from the instructor. This learner-centered environment enabled students to build confidence, reduce writing anxiety, and develop greater ownership of their learning process. The positive responses reported in the post-intervention questionnaire, with **97% of participants expressing satisfaction** with the instructional model, further demonstrate the value of supportive and facilitative classroom practices.

The findings are also consistent with **Vygotsky's Social Constructivist Theory**, which emphasizes that learning occurs through social interaction and guided participation. Collaborative classroom activities, peer review, and instructor feedback provided opportunities for learners to develop writing competence within their Zone of Proximal

Development. The gradual reduction in lower-performing students suggests that structured instructional support enabled many learners to perform beyond their initial level of competence.

Similarly, the results support **Swain's Output Hypothesis**, which argues that language production promotes deeper linguistic processing and greater awareness of language use. The PPCIWS model required students to engage in continuous writing through paragraph development, technical reports, process writing, and reflective tasks. Regular opportunities to produce written texts enabled learners to identify weaknesses, revise their work, and gradually improve grammatical accuracy, vocabulary usage, and coherence.

The findings further align with **Krashen's theory of second-language acquisition**, which proposes that language development is enhanced when learners receive comprehensible input alongside meaningful opportunities for language production. Within the PPCIWS framework, carefully sequenced instructional activities, model texts, classroom demonstrations, and guided writing tasks provided appropriate linguistic input, while regular writing assignments enabled students to transform input into meaningful written communication.

The observed improvement in students' confidence and independent writing ability also reflects **Bandura's Social Cognitive Theory**, particularly the concept of self-efficacy. As students successfully completed progressively challenging writing tasks, they developed greater confidence in their ability to communicate through written English. Continuous formative feedback and repeated writing practice strengthened learners' belief in their own capabilities, encouraging sustained engagement throughout the intervention.

From the perspective of **Hymes' Communicative Competence**, the PPCIWS model extends beyond grammatical accuracy by enabling students to produce contextually appropriate written communication. Technical writing, professional correspondence, reflective journals, and creative writing activities exposed learners to diverse communicative contexts, thereby strengthening their ability to use English effectively in academic and professional settings. This finding is particularly relevant for engineering students, whose future careers require accurate and effective written communication.

An important contribution of the present study lies in its integration of **Daoist educational philosophy** with contemporary theories of language learning. Previous studies have extensively examined process writing, communicative language teaching, and task-based instruction; however, relatively little research has explored how philosophical principles can inform English writing pedagogy in technical education. By incorporating Daoist concepts such as natural progression, harmony, reflective learning, and learner autonomy into the PPCIWS framework, the study proposes a holistic instructional model that extends existing approaches to writing instruction.

The six-module structure of the PPCIWS model further contributed to its effectiveness. Each instructional stage progressively developed specific writing competencies, beginning with grammar and sentence construction before advancing to paragraph organization, independent writing, process writing, technical writing, and creative reflection. This progression enabled students to build upon previously acquired knowledge while minimizing cognitive overload. The balanced integration of linguistic competence, reflective practice, and discipline-specific writing created an instructional environment that supported both academic achievement and professional communication skills.

The findings also have important implications for **English Language Teaching (ELT)** and **English for Specific Purposes (ESP)**. Engineering institutions often prioritize technical content while providing limited structured opportunities for developing professional writing competence. The PPCIWS model demonstrates that progressive classroom instruction, supported by learner-centered pedagogical principles and continuous formative assessment, can significantly strengthen students' writing proficiency without requiring extensive technological resources or major curriculum changes. Consequently, the framework offers a practical and adaptable model for higher education institutions seeking to improve English writing instruction among technical learners.

Overall, the findings confirm that writing proficiency is best developed through continuous, progressive, and reflective learning rather than through isolated instructional practices. By integrating Daoist educational philosophy with established theories of second-language acquisition, the PPCIWS model provides both a theoretical contribution to educational research and a practical instructional framework for enhancing English writing proficiency among engineering students. The study therefore contributes to the growing body of research advocating learner-centered, philosophically informed, and progressively structured approaches to language education.

VII. EDUCATIONAL IMPLICATIONS

The findings of the present study have significant implications for English Language Teaching (ELT), English for Specific Purposes (ESP), engineering education, and curriculum design. The successful implementation of the **Periodic Progressive Classroom Instruction in Writing Skills (PPCIWS)** model demonstrates that a structured, learner-centered instructional framework can substantially enhance English writing proficiency among engineering students. The integration of **Daoist educational philosophy** further broadens the pedagogical relevance of the

model by highlighting the value of gradual learning, reflective practice, learner autonomy, and balanced teacher facilitation.

First, the study suggests that English writing instruction in engineering institutions should move beyond traditional product-oriented teaching and adopt **progressive classroom-based learning**. The PPCIWS model provides a systematic sequence of instructional modules that enables students to develop writing competence through continuous practice, formative assessment, and reflective improvement. Such an approach helps learners acquire writing skills incrementally while strengthening their confidence and motivation.

Second, the findings reinforce the importance of **learner-centered pedagogy** in technical education. The PPCIWS framework encourages active student participation through collaborative writing, peer review, revision, and reflective learning. Consistent with the Daoist principle of *wu wei*, instructors function as facilitators who guide students through meaningful learning experiences rather than relying solely on direct instruction. This shift promotes greater learner independence and sustained engagement in the writing process.

Third, the study has important implications for **curriculum developers**. Engineering curricula often emphasize technical knowledge while allocating limited time for systematic writing instruction. Incorporating the six progressive modules of the PPCIWS framework into communication skills or professional English courses can provide students with structured opportunities to develop grammatical accuracy, coherence, technical writing competence, and critical thinking. The model can also be adapted to other professional disciplines such as management, pharmacy, computer science, and applied sciences, where effective written communication is equally important.

Fourth, the findings highlight the value of **continuous formative assessment**. Regular writing tasks, timely feedback, self-assessment, and peer evaluation enabled students to monitor their progress and address weaknesses throughout the intervention. Such assessment practices align with contemporary approaches to language learning and support sustained improvement rather than focusing exclusively on end-of-semester examinations.

From a theoretical perspective, this study demonstrates that **Daoist educational philosophy** can provide a complementary framework for contemporary language pedagogy. The principles of *ziran* (natural development), *wu wei* (facilitative teaching), harmony, and self-cultivation reinforce learner-centered instructional practices by encouraging gradual skill development, reflective learning, and balanced classroom interaction. Integrating these principles with established theories of second-language acquisition offers a broader perspective on writing instruction that extends beyond purely linguistic or cognitive approaches.

The PPCIWS model also has implications for **teacher professional development**. English language teachers can adopt progressive instructional planning, reflective teaching practices, and learner-centered classroom strategies to create supportive learning environments. Training programmes for ELT practitioners may incorporate the PPCIWS framework as an example of integrating educational philosophy with practical classroom methodology, thereby encouraging innovative approaches to writing instruction.

Finally, the study contributes to **policy and institutional practice**. Universities seeking to improve graduate employability may strengthen communication skills programmes by embedding structured writing instruction across the curriculum. The PPCIWS model provides a practical framework that can be integrated into engineering education without major curricular restructuring or extensive technological resources. Its emphasis on continuous development, learner engagement, and reflective practice offers a sustainable approach to improving students' academic and professional writing competence.

Overall, the educational implications of this study extend beyond English writing instruction. By integrating progressive classroom pedagogy with Daoist educational principles, the PPCIWS model provides a transferable instructional framework that supports holistic learner development, strengthens written communication skills, and prepares engineering graduates to meet the linguistic and professional demands of higher education and the global workplace.

VIII. CONCLUSION

The present study investigated the effectiveness of the **Periodic Progressive Classroom Instruction in Writing Skills (PPCIWS)** model in enhancing the English writing proficiency of engineering students through the lens of **Daoist educational philosophy**. The findings demonstrate that a structured, progressive, and learner-centered instructional framework can significantly improve students' writing competence by fostering gradual skill development, continuous practice, reflective learning, and constructive feedback. The marked improvement in students' post-test performance, together with their positive perceptions of the instructional programme, confirms the effectiveness of the PPCIWS model in addressing the writing challenges commonly experienced by English as a Second Language (ESL) learners.

A distinctive contribution of this study is its integration of **Daoist educational principles**—particularly *ziran* (natural development), *wu wei* (facilitative teaching), harmony, and self-cultivation—with contemporary English writing pedagogy. While previous studies have primarily focused on linguistic, cognitive, or communicative approaches to

writing instruction, the present research demonstrates that philosophical perspectives can enrich classroom pedagogy by encouraging learner autonomy, reflective practice, and balanced teacher–student interaction. The PPCIWS framework illustrates how progressive classroom instruction and Daoist educational thought can work together to create a supportive learning environment that nurtures both language proficiency and holistic learner development.

The study also makes an important pedagogical contribution to **English Language Teaching (ELT)** and **English for Specific Purposes (ESP)** by presenting a structured six-module instructional framework that can be integrated into engineering and other professional education programmes. The model provides teachers with a practical approach to developing grammatical accuracy, coherence, technical writing competence, creativity, and confidence through systematic classroom engagement rather than isolated writing exercises. Its flexibility makes it suitable for adaptation across diverse higher education contexts where effective written communication is an essential graduate attribute.

Despite these contributions, the study has certain limitations. The research was conducted with a relatively small sample of engineering students from a single institution, which may limit the generalizability of the findings. In addition, the intervention was implemented over a six-week period; therefore, the long-term impact of the PPCIWS model on writing proficiency was not examined. Future research may include larger and more diverse participant groups from multiple institutions, employ longitudinal research designs, and compare the PPCIWS model with other contemporary writing pedagogies. Further studies may also investigate the application of Daoist educational principles in other domains of language learning, including speaking, reading, listening, academic communication, and digital learning environments.

In conclusion, the PPCIWS model represents an innovative pedagogical framework that combines progressive classroom instruction with Daoist educational philosophy to enhance English writing proficiency among engineering students. By promoting gradual learning, reflective practice, learner autonomy, and continuous improvement, the model contributes to the advancement of contemporary writing pedagogy and offers a sustainable instructional approach for higher education. The study is expected to stimulate further interdisciplinary research at the intersection of educational philosophy, English language teaching, and professional communication, thereby enriching both theoretical understanding and classroom practice.

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