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Abstract: The current study addresses the crucial role of Critical Thinking Skills (CTSs) in today's decision-making and problem-solving landscape. It emphasizes the integration of CTSs within the context of English as a Foreign Language (EFL) instruction, with a particular focus on the situation in Iraq. While there is ample theoretical discourse on the significance of CTSs, their practical application in EFL classrooms, especially in Iraq, presents notable challenges, primarily because of the dearth of specialized teaching methodologies. The study's central objective is to evaluate the impact of incorporating Critical Thinking (CT) into EFL instruction, specifically in the analysis of literary texts. To achieve this, the research adopts a control-experimental pretest-posttest design and employs a CT test as an assessment tool. The findings of the study are noteworthy, demonstrating a significant improvement in the CTSs and textual interpretation abilities of students in the experimental group, especially when analysing poetry and short stories. This highlights the potential benefits of integrating CT into EFL instruction, enhancing students' analytical capabilities and their understanding of literary content.

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الخلاصة:

تتناول الدراسة الحالية الدور المهم الذي تلعبه مهارات التفكير الناقد في عملية صنع القرار وحل المشكلات في وقتنا الحالي. وتؤكد الدراسة أيضاً على دمج مثل هذه المهارات في سياق تعليم اللغة الإنجليزية كلغة أجنبية، مع التركيز بشكل خاص على الوضع في العراق. في حين أن هناك خطاب نظري وافر حول أهمية التفكير الناقد، فإن تطبيقها العملي في فصول اللغة الإنجليزية كلغة أجنبية، وخاصة في العراق، يمثل تحديات ملحوظة، ويرجع ذلك في المقام الأول إلى ندرة منهجيات التدريس المتخصصة.

الهدف الرئيسي للدراسة هو تقييم أثر دمج التفكير الناقد في تعليم اللغة الإنجليزية كلغة أجنبية، وتحديداً في تحليل النصوص الأدبية. ولتحقيق ذلك، يعتمد البحث على التصميم التجريبي الضابط للاختبار القبلي والبعدي، ويستخدم اختبار التفكير الناقد كأداة للتقييم. وكانت نتائج الدراسة جديرة بالملاحظة، حيث أظهرت تحسنا ملحوظا في مهارات دعم الاتصالات وقدرات التفسير النصي لدى طلاب المجموعة التجريبية، وخاصة عند تحليل قصائد الشعر والقصص القصيرة. وهذا يسلط الضوء على الفوائد المحتملة لدمج مهارات التفكير الناقد في تعليم اللغة الإنجليزية كلغة أجنبية، وتعزيز قدرات الطلاب التحليلية وفهمهم للمحتوى الأدبي.

الكلمات المفتاحية: التفكير الناقد، مهارات التفكير النقدي، الأدب، الأنواع الأدبية.

1. Introduction

In the contemporary era, characterised by a proliferation of knowledge and rapid technological advancement, the cultivation of cognitive abilities and the development of adeptness in rational thought have emerged as enduring proficiencies with manifold implications spanning both academic spheres and everyday contexts. The nurturing of CTSs empowers individuals to effectively analyse, synthesise, and evaluate information, culminating in heightened insight into decision-making and resolution of complex issues. Consequently, the cultivation of these competencies assumes a pivotal role within modern pedagogy, endowing individuals with the ability to navigate the intricacies of the world and contribute to the social fabric as astute and knowledgeable members.

1.2 Statement of the Problem

Scholars have directed substantial scholarly attention towards cultivating CTSs, a focus notably within the EFL education domain. Despite the extensive
Theoretical discourse surrounding this subject, the practical implementation of CT within EFL classrooms presents a formidable challenge.

The present study acknowledges the intricate challenge of integrating CT within EFL classrooms. It endeavours to bridge the gap between pedagogical techniques and scholastic achievements, a concern that has become particularly acute within the EFL context. Specifically, this current investigation introduces an innovative approach for assimilating CTSs, particularly within English literature.

1.3 Research Questions

The research questions were formulated to elucidate the delineated research problem subsequently:

- How can the harmonious integration of CT be realised within the framework of English literature pedagogy at the university level?
- What observable results ensue upon the academic attainments of university-level EFL students when the cultivation of CTSs is interwoven into their interaction with literary materials?
- To what extent can incorporating CTSs into literary education manifest as an efficacious task, particularly in teaching two literary genres: poetry and short story?

1.4 Aims of the Study

- Investigating the effectiveness inherent in integrating CT within the framework of EFL instruction within the educational context of Iraq.
- Conducting a methodical exploration of the effectiveness of an infusion-oriented approach to enhance the CTSs of EFL university students enrolled in literature courses.
- Examining the impact of CTSs on the academic achievements of EFL students, particularly in terms of their proficiency in engaging with a spectrum of English literary compositions.

1.5 Hypotheses

In light of the comprehensive review of pertinent literature and the meticulous consideration of the antecedently outlined research questions, the current investigation has formulated the following null hypotheses:
• There is no statistically significant difference between the experimental and control groups’ mean scores in terms of developing CTSs when dealing with poetry.
• There is no statistically significant difference between the experimental and control groups’ mean scores in terms of developing CTSs when dealing with short stories.
• There is no statistically significant difference between the mean scores of the pretest and posttest in CTSs of the experimental group when dealing with poetry.
• There is no statistically significant difference between the mean scores of the pretest and posttest in CTSs of the experimental group when dealing with short stories.

2. Theoretical Background and Previous Studies

2.1 Critical Thinking: Basic Approaches

A substantial scholarly discourse has explored CT, engendering diverse viewpoints across various disciplines. Scholars from philosophy, psychology, education, and other relevant fields have meticulously examined CT, yielding a multifaceted panorama of interpretations and insights.

2.1.1 The Philosophical Approach

The philosophical paradigm conceives the critical thinker as an archetypal construct, underscored by focusing on the pinnacle of cognitive capabilities attainable under optimal conditions. However, the requisites of formal logical systems upon which the philosophical approach is often constructed may not be in exact alignment with CT per se, although they may sporadically employ such techniques. These formal systems might not invariably mirror human thought processes, and their application can be hindered by various constraints, including temporal limitations, restricted information accessibility, and the recognised restrictions imposed by finite and bounded working memory capacity. Nevertheless, the philosophical perspective proffers valuable insights into CT (Sternberg, 1986).

The principles from this philosophical perspective encompass the inclination and proficiency to partake in an activity with thoughtful scepticism (McPeck,
This involves reflective and rational thinking, focused on discerning what to believe or undertake (Ennis, 1985). It pertains to adept and responsible thinking that enhances sound judgment by leaning on criteria, self-correcting, and adapting to the context (Lipman, 1988).

Moreover, it entails purposeful, self-regulated judgment that leads to interpretation, analysis, evaluation, and inference. This includes explaining the evidential, conceptual, methodological, and conceptual factors on which the judgment is grounded (Facione, 1990). It refers to controlled and independent cognitive processes that encompass the principles of thinking appropriate for a particular manner or area of thought (Paul, 1992).

These articulated definitions of CT converge on delineating a critical thinker’s essential attributes and characteristics, accentuating traits such as reflective and judicious thinking, incorporating criteria and contextual factors in decision-making, and the capacity for self-regulation in forming judgments. However, these definitions exhibit abstraction, ambiguity, and individual-centric orientation constraints. They tend to overlook the pervasive role of societal and contextual factors that potentially mould and shape CT, and their practical application and measurement may pose challenges.

2.1.2 The Cognitive Psychological Approach

The cognitive psychological approach diverges from the philosophical perspective in two fundamental manners. Cognitive psychologists examine how individuals think within real-world contexts instead of speculating upon the mental processes under idealised circumstances. Then, as an alternative to defining CT in terms of the ideal traits of a critical thinker or articulating criteria for “sound” thinking, cognitive psychologists characterise CT by elucidating the actions or behaviours that critical thinkers can manifest (Sternberg, 1986). This definitional paradigm entails enumerating specific skills or procedures employed by critical thinkers (Lewis & Smith, 1993).

Nevertheless, critics of this approach contend that it risks fragmenting the essence of CT into purported discrete skills and procedures, potentially leading to a loss of holistic understanding. This reductionist facet inherent in the cognitive psychological approach has garnered criticism. Scholars (such as Bailin 2002) contend that viewing CT as a sequence of isolated steps or skills stems from a fundamental misinterpretation influenced by the behaviourist imperative to define
constructs in directly observable terms. Additionally, they highlight cognitive psychologists’ tendency to concentrate on the outcomes of mental processes, such as behaviours or expressive competencies (e.g., analysis, interpretation, and formulation of practical inquiries), given the unobservable nature of the actual thought process.

Despite these critical appraisals, the cognitive psychological approach has yielded operational definitions of CT. Sternberg (1986) characterises CT as individuals’ mental processes and strategies for problem-solving, informed decision-making, and acquiring novel concepts. On the other hand, Halpern (1998) defines CT as the utilisation of cognitive skills or strategies that enhance the probability of attaining desirable outcomes. Willingham (2007) accentuates the significance of open-mindedness, dispassionate reasoning, and evidentiary demand in the CT process. These definitions provide a constructive framework for comprehending CT and its relevance within the domains of decision-making and problem-solving.

2.1.3 The Educational Approach

Extensive deliberations concerning the role of CT have engaged the attention of education professionals. The contributions of Benjamin Bloom and his associates are noteworthy among these discussions, who have garnered significant recognition within the educational community for formulating a taxonomy delineating information-processing skills relevant to teaching and evaluating higher-order cognitive functions. In their hierarchical classification system established in 1956, Bloom and his associates outlined six progressive tiers, positioning “comprehension” at the foundational level and “evaluation” at the pinnacle. Of particular note, CT is commonly situated within the three uppermost tiers, denominated as ‘analysis’, ‘synthesis,’ and ‘evaluation’ (Kennedy et al., 1991).

Bloom and his collaborators embarked on an endeavour to recalibrate the practices of examination setters. They achieved this by categorising questions within their six-tier framework, enabling assessors to curtail the emphasis on mere recall, a dimension Bloom referred to as ‘knowledge’ and Krathwohl (2002) labelled ‘remember.’ Instead, they sought to generate inquiries that probed cognitive processes encompassing understanding, application, analysis, synthesis, and evaluation, achieving notable success.
Ennis (1987, 1989) introduces four primary pedagogical approaches to inculcating CT within an educational context. The first approach, the general approach, entails the instruction of CT as a distinct subject, focusing on explicit pedagogy of cognitive skills and other CT-relevant proficiencies, irrespective of the specific subject matter. The second approach is the infusion approach, involving the integration of CT skills instruction within the purview of particular subject content throughout the curriculum. The third approach is the immersion method, wherein the development of CT serves as an implicit objective within the curriculum. Lastly, the hybrid approach amalgamates the general approach with either the infusion or immersion methodology to cultivate CTSs effectively (Ennis, 1985).

Diverging from philosophical and psychological traditions, the educational approach derives strength from its foundation in extensive classroom experience and astute observations of student learning extended over substantial durations. Critiques have noted limitations within the educational approach, primarily stemming from its inherent ambiguity. The concepts within the taxonomy lack the precision requisite for offering clear guidance in instruction and assessment. Furthermore, educational frameworks have not undergone the same rigorous validation as those originating from philosophical or psychological paradigms (Ennis, 1985; Sternberg, 1986).

2.2 Critical Thinking Taxonomies

Effective practical instruction and coaching of CTSs necessitate a thorough understanding of the pertinent theories and associated taxonomies. The literature encompassing CT comprises diverse taxonomies that elucidate the constituent components of CT. Certain scholars have constructed models that illuminate the essence of CT to enhance clarity. The ensuing sections offer an exploration of the foremost taxonomic frameworks formulated by esteemed authorities within the realm of CT.

2.2.1 Bloom’s Taxonomy (1956)

Approximately sixty years ago, Benjamin Bloom introduced a classification method for instructional activities based on increasing complexity, featuring six tiers within the cognitive domain, each linked to distinct mental capacities and forming the foundation for CT theory. Bloom’s Taxonomy (1956), a widely-used
framework, organises higher-order thinking into six hierarchical stages, emphasising that advanced skills are prerequisites for mastering more basic ones. In the revised model, lower-level teaching focuses on information retention, comprehension, and application, while higher tiers involve analysis, synthesis, and evaluation. The stages include ‘Knowledge’ for information recall, ‘Comprehension’ for organising knowledge, ‘Application’ for using knowledge with specific rules, ‘Analysis’ for dissecting elements, ‘Synthesis’ for creating something new, and ‘Evaluation’ for assessing information. In conclusion, Bloom’s Taxonomy provides a lasting structure for thinking skills, elegantly capturing the progression from foundational to advanced cognitive abilities.

2.2.2 Ennis’s Fundamental Domains (1987)

In the context of academic research, a model aims to represent phenomena and enable effective communication about them accurately. Ennis (1985, 1987) categorised CT dispositions and abilities into twelve skills organised across four fundamental domains: “clarity, basis, inference, and interaction.” The ‘clarity’ domain was further divided into primary and advanced clarity skills, involving activities like questioning, defining terms, and identifying assumptions. The ‘basis’ domain concerns supporting inferences and evaluating evidence, including assessing source credibility. The ‘inference’ domain encompasses deducing and evaluating deductions, inducing and assessing inductions, and making value-based judgments. The ‘interaction’ domain involves engaging with others, covering activities from problem definition to implementation monitoring. While Ennis’s model offers a comprehensive array of CTSs, it lacks established criteria for assessing skill quality, potentially leading to shallow or incorrect deductions. Although primarily intended for instruction, this model could serve as a foundation for developing a model focused on categorising students’ varied manifestations of CTSs, though McLean (2005) suggests additional methods for skill quality assessment may be necessary.

2.2.3 Brookfield’s Stages of CT (1987)

According to Brookfield (1987), CT encompasses four essential elements: identifying and questioning assumptions, recognising contextual significance, exploring creative alternatives, and engaging in reflective scepticism. Brookfield’s CT model is structured into five stages, akin to Ennis’s “deciding on an action”
competence. These stages include the trigger event, where unexpected occurrences lead to internal confusion; appraisal, a comprehensive evaluation phase that involves self-critique and seeking input; exploration, in which novel approaches are tested; development of alternative perspectives, aligning with cognitive tendencies; and integration, assimilating the chosen solution. Unlike Ennis’s model, Brookfield’s framework emphasises assumptions, context, and alternatives, including reflective scepticism as a critical skill. It also highlights the quality of thinking, where critical thinkers discard incorrect assumptions and seek alternative ones for improved decision-making.

2.2.4 Beyer’s Cognitive Processes (1988)

Barry Beyer’s (1988) perspective on CT expands on Bloom’s Taxonomy by emphasising an evaluative role. Beyer highlights criteria as central to CT, drawing from the Greek term “kriterion,” which signifies assessment standards. According to Beyer (1988), CT evaluates claims for accuracy, authenticity, plausibility, and sufficiency. He outlines ten cognitive processes integral to CT that can be adapted depending on the task. These processes involve discerning subjective value claims from objective facts, distinguishing pertinent information, assessing claim veracity and evidence, identifying unclear or interpretable statements, revealing underlying assumptions, recognising biases, detecting logical fallacies, identifying inconsistencies, evaluating argument strength, and synthesising information for reasoned conclusions. Beyer’s approach underscores the importance of criteria and offers a comprehensive framework for evaluating claims and arguments, fostering rigorous evaluative thinking applicable across academic and professional contexts.

2.2.5 Facione’s Delphi Report (1990)

The past 15 years have seen significant progress in CT, highlighted by publishing a comprehensive ‘expert group’ report that employed the Delphi method. This method is commonly used to establish consensus or divergence among experts in domains characterised by theoretical frameworks yet potentially complicated by ambiguous terminology, connotations, emphasis, or other complexities. A significant accomplishment of the report is formulating a working definition of a CT skill. This skill is engaging in a specific activity, process, or procedure, effectively functioning within defined circumstances. Proficiency in CT involves comprehending a prescribed set of sometimes implicit guidelines and
knowing when to apply these approaches. The Delphi Report’s Table (1) captures the core components of CT that received consensus from the expert group, presenting a hierarchical structure of primary skills intertwined with sub-skills. The experts recognise that while not all the enumerated skills are individually essential for CT, they work synergistically and interdependently to foster its development collectively (Facione, 1990, 2011).

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2.2.6 Paul-Elder’s Critical Thinking Framework (1997)
The Paul-Elder Critical Thinking Framework, introduced in 1997, emphasises two dimensions for enhancing thinking skills in students: understanding the components of their thinking process and evaluating their effectiveness. The framework consists of Elements of Thought (foundational aspects of reasoning), Universal Intellectual Standards (benchmarks for assessing reasoning quality), and Intellectual Traits (qualities developed by applying standards to thought elements). This framework fosters skilled critical thinkers capable of addressing complex challenges and effective communication. It holds value for students, educators, and anyone seeking to improve their CTSs.

2.2.7 Anderson and Krathwohl’s Revised Bloom’s Taxonomy (2001)

In 2001, Anderson and Krathwohl revised Bloom’s taxonomy to make it more relevant for 21st-century students, resulting in the Revised Bloom’s Taxonomy (RBT). This updated version brought significant changes, transitioning the original six hierarchical stages from noun to verb forms. The lowest level changed from ‘knowledge’ to ‘remembering,’ ‘comprehension’ became ‘understanding,’ and ‘synthesis’ transformed into ‘creating.’ The revised framework now includes the levels of remembering, understanding, applying, analysing, evaluating, and creating. These adjustments provide educators with a more comprehensive instrument for evaluating and improving student learning results in contemporary education. Tabačková (2015) suggests that higher-level inquiries requiring comparisons, evaluations, and conclusions are intricately linked with CT, while lower-level methods like rehearsing and rewriting are associated with the lower tiers of Bloom’s revised taxonomy. This distinction highlights the dynamic relationship between cognitive engagement and the levels of Bloom’s taxonomy, with higher-level cognitive strategies closely tied to the development of CTSs.

2.3 Defining Literature

Literature, a concept with multifaceted interpretations, lacks a universally accepted definition. Diverse viewpoints exist among scholars and educators, especially within the realm of foreign language teaching and learning, illustrating the complexity of the term.

Fowler (1966) elucidates that literature serves as a vehicle for writers to convey their beliefs about human experiences, emotions, thoughts, and societal
interactions. It delves into life’s complexities, exploring moments of joy and sorrow, intimate relationships, personal opinions, profound loves and hates, courage, honour, hope, pride, empathy, disappointment, and sacrifice.

Literature is a tool for nurturing individual responses to language use. It is a crafted mechanism to evoke specific emotions, employing a distinct language that departs from the functional language used for communication (Widdowson, 1975).

Carter (1982) asserts that literature epitomises language in use, and studying literary texts aids in comprehending various language organisational systems. Students enhance their grasp of language usage by engaging with literary works and fostering their CTSs. Literary texts encompass diverse styles, registers, and text types at varying difficulty levels, improving language proficiency.

Literary texts possess a non-trivial quality, addressing subjects that hold significance for the author, distinguishing them from language input in pedagogy that often simplifies experiences. This authenticity resonates with learners, serving as a potent motivator (Brumfit & Carter, 1989).

Duff and Maley (1991) suggest three critical functions of using literary texts: linguistic, methodological, and motivational. These texts exemplify various styles and registers, allowing readers to engage interactively through multiple interpretations.

Lazar (1993) defines literature as fictional narratives – novels, short stories, plays, and poems – that convey their message through rich, multi-layered language. This definition highlights the intricate connection between language and literature. Literary works employ linguistic devices like metaphors, similes, alliteration, and unusual syntax, contributing to the aesthetic value and multiple layers of meaning, which allow for diverse interpretations.

Hawkins and Allen (1991) provide a definition of literature as written works esteemed for their artistic qualities, particularly encompassing fiction, drama, and poetry. These works encapsulate a range of facets of life, such as joy, sorrow, psychological well-being, societal evolution, and learning.

Moreover, literature plays a pivotal role in self-exploration, understanding others, and defining identities. It stimulates emotions and enhances comprehension of life’s facets (Langer, 1997). Literature transports us to other worlds, evokes emotions, and deepens our understanding of life’s intricacies. Literature enhances enjoyment, enriches experiences, and critically assesses ideals. It offers
knowledge, illuminates intellect, and purifies emotions and morality, making it a vital education component (Diyanni, 2002).

In conclusion, literature can be defined as creatively written pieces possessing recognised artistic value. They exhibit excellence in style and expression while addressing themes of universal significance.

2.4 Literary Genres

The term “genres of literature” refers to distinct styles or types of writing offering language exposure in EFL classrooms. Genre study involves categorising literature based on shared characteristics. While some genres have clear distinctions, categorisation is not always straightforward. Multiple classification systems exist based on form, emotional impact, or historical context, resulting in subgenres or hybrids. Understanding different literary genres gives EFL learners rich language exposure, categorising literature into groups with shared traits. Islam (2016) divides literature into drama, poetry, and prose. Engaging with poetry demands CT and interpretive skills, fostering novel perspectives and discussions. Drama study promotes group skills, problem-solving, and CT. Short stories are manageable, catering to diverse audiences and making them versatile tools for EFL instruction. While genre classification varies, studying genres enhances linguistic proficiency and cultivates CTs by exploring different forms of literature.

2.5 Previous Studies

2.5.1 Tung and Chang’s Study (2009)

In this investigation, the effectiveness of incorporating literary reading into the educational process to foster CTs among college students was examined. Specifically, the research addressed the following research inquiries: (1) Does engagement with literature contribute to the cultivation of students’ CTs? (2) Is there any observable relationship between students’ proficiency in the English language and the development of their CTs? (3) Which educational activities prove most conducive to nurturing CT in students? The study involved a cohort of fifty university students who engaged in a range of instructional activities, including spontaneous quizzes, reflective learning journals, collaborative group presentations, in-class discussions utilizing Socratic questioning techniques, and individual essay-based assessments. To gauge the impact of these activities on
students’ CTSs, the California Critical Thinking Skills Test (CCTST) was administered both prior to and following the intervention, complemented by a self-assessment questionnaire and a personal interview with the instructor.

The findings of this study elucidated that reading literary texts exerted a positive influence on students’ CTSs, particularly in terms of enhancing analytical skills among those who had initially scored low on the pretest. Notably, the results indicated that students’ proficiency in the English language did not exhibit a discernible correlation with their performance on the pre- and post-test measures of CTSs. Furthermore, the study discerned that guided in-class discussions emerged as a more effective means of promoting CT compared to other student-directed activities, as per students’ reports.

2.5.2 Madondo’s Study (2012)

This study presents a critical participatory action research study aimed at augmenting the CTSs of secondary school students in South Africa, with implications that extend beyond the immediate context. The research employed a short story authored by Govender in 1949, which was assigned to grade 11 students, as the foundational text for qualitative data collection. The study encompassed a cohort of forty students and employed various qualitative research methods, including informal discussions, classroom observations, semi-structured interviews, CT exercises, and student assignments, for the purposes of inductively gathering, interpreting, and analysing data.

The analysis of the collected data unveiled that it is feasible to align curriculum objectives with the cultivation of CTSs, even when instructional activities take place outside the conventional classroom setting. This alignment can be achieved through the implementation of specific strategies and tasks. Furthermore, the study discerned that the characteristics of a given task, its sequencing within the teaching process, and the attributes of the learning environment all exert a significant influence on its effectiveness in fostering CT.

2.5.3 Tabačková’s Study (2015)

This study investigated the efficacy of utilizing literary texts as a means to enhance students’ CTSs. The central hypothesis posited that engaging with literature would facilitate students’ participation in CT activities, encompassing the ability to discern between denotative and connotative meanings, identify plot
connections, and evaluate the tone of a text. This, in turn, was expected to equip students with improved skills for comprehending the underlying messages embedded within literary works. The research involved a sample of 50 tenth-grade students and employed a one-group pretest-posttest design to evaluate the impact of the intervention on students’ CTSs. Within the framework of an American literature course, specific CT strategies were incorporated, aiming to demonstrate the broader applicability of literary works in encouraging CT beyond the confines of the classroom, as they often mirror real-life situations. Furthermore, the study explored the relationship between CT and the reading of literary texts among Slovak university students, employing Emily Dickinson’s poem, "Because I Could not Stop for Death," for a more in-depth examination of CT.

The findings of the study underscore the effectiveness of literature in fostering and enhancing students’ CTSs and subject knowledge, as well as its capacity to enhance critical dispositions and moral attitudes, fostering a greater openness to alternative perspectives. Ultimately, the research underscores the advantages of integrating literary texts into educational curricula as a means to promote a culture of CT and prepare students for success across diverse professional domains.

2.5.4 Azizi et al.’s Study (2022)

This study aimed to evaluate the effectiveness of a poetry programme in cultivating CTSs among EFL students, which constitutes a fundamental component of literature instruction. The poetry programme was meticulously designed with the intent of directing students’ attention towards the importance of CT and achieving the specified research objectives. Employing a case study methodology, the programme was tailored to incorporate culture-specific content. Four sophomore female students participated in a series of diverse tasks, and their CTSs were assessed both before and after the intervention through teacher diaries. The analysis of the case study data revealed a discernible enhancement in the students’ CTSs attributable to their engagement in the poetry intervention. The students developed commendable CT habits, markedly improving their capacity to critically evaluate ideas presented during the classes and to articulate their viewpoints effectively. Consequently, the study’s findings underscore the potential of poetry as a valuable and pragmatic resource for nurturing CTSs among students, particularly in EFL contexts.
3. Methodology

3.1 The Experimental Design

The study utilised a quasi-experimental design, specifically a control-experimental pretest–posttest design, to evaluate the impact of the intervention. In this design, only the Experimental Group (EG) received the intervention involving the integration of CTSs such as analysis, synthesis, and evaluation, while the Control Group (CG) was taught using the usual literature teaching method. Following the four-month intervention period, a posttest was given to both groups to measure the efficacy of the intervention.

3.2 Population and Sample of the Research

The current study concentrated on senior students enrolled in the English departments of the College of Arts and the College of Education at the University of Mosul during the academic year 2022-2023, encompassing an estimated total population of 7,026 students. Employing a quasi-experimental design with non-random assignment, the research aimed to establish a causal relationship between independent and dependent variables within the educational setting. Ultimately, a sample of 60 university students studying EFL was chosen, evenly divided into two groups: an EG, which received instruction in integrated CTSs, and a CG, which adhered to the teaching methods currently in practice.

3.3 Research Instruments

3.3.1 The Critical Thinking Test

Extensive examination of numerous previous CT tests and an in-depth review of relevant literature in this field were undertaken. As a result, it was determined that a customized CT test should be developed exclusively for this study to assess the students’ CTSs. This test was meticulously designed to systematically and logically evaluate students’ abilities to analyse, synthesise, and evaluate literary texts.

3.3.2 Validity of the Test

Validity pertains to the capacity of a research study to accurately determine whether its measures align with what it claims to assess, thereby providing an approximation of the precision and truthfulness of the obtained results. The current study employed two validity measures to ensure the robustness of the assessment.
Content validity was established by aligning test items with course content while experts in the field reviewed and approved the assessment. This ensured accurate representation of the targeted CTSs – analysis, synthesis, and evaluation. Face validity was achieved through a panel of judges who reviewed and suggested modifications to test items, confirming that the assessment appropriately measured the intended CTSs.

3.3.3 Reliability of the Test

Reliability refers to the degree to which an assessment tool or instrument consistently generates similar results when applied repeatedly over time and across various testing circumstances. In this study, the Kuder-Richardson–20 Coefficient formula method, commonly abbreviated as KR-20, was employed to ascertain the test’s reliability and calculate the reliability coefficient, yielding a value of 0.81. This finding indicates a satisfactory level of reliability for the test, as it falls within the generally accepted range of 0.70 or higher, which signifies a reliable assessment tool.

3.3.4 The Experiment Application

The current study commenced with meticulous sample selection, ensuring congruence between the experimental and control groups across pertinent variables. Subsequently, rigorous research tools and lesson plans were developed for both groups, emphasizing methodological rigor. Lessons for both the EG and CG adhered to strict protocols to maintain consistency and validity.

The course materials were thoughtfully chosen, encompassing two poems, "Mother to Son" and "The Dream Keeper" by Langston Hughes, and two short stories, "The Tell-Tale Heart" by Edgar Allan Poe and "Charles" by Shirley Jackson. These selections emerged after extensive consultations with English literature educators from the College of Arts and College of Education, with each text chosen for its literary and educational value. Each text was carefully curated to stimulate participants’ CTSs when engaging with literary works. The Langston Hughes poems were selected to exemplify the potency of metaphor and symbolism in poetry, encouraging students to delve into deeper symbolic meanings. Likewise, the short stories, "Charles" by Shirley Jackson and "The Tell-Tale Heart" by Edgar Allan Poe, were chosen due to their complex themes, requiring students to explore beneath the surface to grasp the authors’ intentions. These texts also served to
illustrate character development and foreshadowing techniques, pivotal elements of literary analysis. In essence, these materials were meticulously chosen to foster students’ CTSs, merging literary and educational value to ignite students’ enthusiasm for English literature.

4. Data Analysis and Discussion of Results

This section of the study presents the analysed outcomes of the collected data within the experimental design. Initial descriptive statistics, including mean scores and standard deviations, were computed for both the EG and CG, offering an initial understanding of data distribution. Subsequent paired t-tests were conducted within each group to compare pretest and posttest mean scores, revealing potential changes in performance over the study period. Unpaired t-tests then compared the posttest results between the experimental and control groups, evaluating the impact of integrated CTSs on academic achievement.

4.1 The First Null Hypothesis

This hypothesis states that:

“There is no statistically significant difference between the experimental and control groups’ mean scores in terms of developing CTSs when dealing with poetry.”

This hypothesis pertains to the results obtained from the CT test. The main aim was to assess this hypothesis, particularly focusing on the statistical significance of the differences between the EG and the CG. Accordingly, the collected data underwent thorough statistical analysis using the t-test for two independent samples. Subsequently, a detailed comparison of the mean scores from the EG and CG was conducted (See Table 2 for specific results).

<table>
<thead>
<tr>
<th>Literary Genre</th>
<th>Group</th>
<th>No.</th>
<th>Mean</th>
<th>SD</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Computed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tabulated</td>
</tr>
</tbody>
</table>

Table (2): The Mean Scores, Standard Deviation and T-Values of the Two Groups in the Critical Thinking (Poetry) Posttest
The data presented above clearly shows that the calculated ‘t’ value is (30.416) with (58) degrees of freedom at a significance level of (0.05). In contrast, the tabulated t-value for the same degrees of freedom and significance level is (1.982). This substantial difference in t-values strongly suggests a significant finding in favour of the EG.

One of the reasons for these results is the successful implementation of the integrated CTSs approach within the EG’s instruction. It is possible that the explicit focus on CTSs in analysing, synthesising, and evaluating literary genres, particularly poetry, has enhanced the students’ ability to engage deeply with the content, leading to improved CT outcomes. Additionally, the experimental approach has provided students with a broader range of tools and strategies to navigate complex literary texts, thus contributing to higher mean scores in the EG.

4.2 The Second Null Hypothesis

This hypothesis states that:

“There is no statistically significant difference between the experimental and control groups’ mean scores in terms of developing CTSs when dealing with short stories.”

This hypothesis centers on the results obtained from the CT test. To confirm the hypothesis in question, which pertains to the statistical significance of the differences between the pretest and posttest measurements, the collected data underwent comprehensive statistical analysis utilizing the t-test for two independent samples. Following this analysis, a comparative assessment of the mean scores between the EG and CG was performed.

<table>
<thead>
<tr>
<th>Literary Group</th>
<th>No.</th>
<th>Mean</th>
<th>SD</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG</td>
<td>30</td>
<td>4.1662</td>
<td>0.49679</td>
<td>30.416</td>
</tr>
<tr>
<td>CG</td>
<td>30</td>
<td>0.2484</td>
<td>0.50095</td>
<td>1.982</td>
</tr>
</tbody>
</table>

* Significant at ≤0.05 level under (58) degrees of freedom
The findings presented in Table (3) unequivocally indicate that the computed ‘t’ value is (29.572) with (58) degrees of freedom at a significance level of (0.05). In contrast, the tabulated t-value for the same degrees of freedom and significance level is (1.982). This substantial disparity in t-values strongly suggests a significant outcome favouring the EG. Consequently, the second null hypothesis is rejected, and the alternative is accepted. This outcome underscores a statistically meaningful distinction between the pre-and post-test performances within the EG. Notably, the posttest results surpassed the pretest results in a noteworthy manner. These outcomes provide compelling evidence that integrating CT strategies into the instruction of English literature has yielded evident benefits for the participants, culminating in substantial academic advancement.

### 4.3 The Third Null Hypothesis

“There is no statistically significant difference between the mean scores of the pretest and posttest in CTSs of the experimental group when dealing with poetry.”

This hypothesis centres on evaluating the results obtained from the administered CT test. A comprehensive statistical analysis was employed to validate the hypothesis in question, which examines the statistical significance of disparities between scores before and after the intervention. Specifically, the collected data underwent rigorous examination by applying the t-test for two independent samples. This facilitated a meticulous comparison of mean scores between the EG and the CG, enabling a thorough assessment of the effectiveness of the intervention in fostering CTSs.

Table (4): The Mean Scores, Standard Deviation and T-Values of the Experimental Group in the Critical Thinking (Poetry) Pre- and Post-test

<table>
<thead>
<tr>
<th>Literary Genre</th>
<th>Group</th>
<th>No.</th>
<th>Mean</th>
<th>SD</th>
<th>Computed</th>
<th>Tabulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Story</td>
<td>EG</td>
<td>30</td>
<td>4.5792</td>
<td>0.49180</td>
<td>29.572</td>
<td>1.982</td>
</tr>
<tr>
<td></td>
<td>CG</td>
<td>30</td>
<td>0.8171</td>
<td>0.49364</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at ≤0.05 level under (58) degrees of freedom
The outcomes presented in Table (4) undeniably reveal that the calculated ‘t’ value stands at (35.936), obtained with (58) degrees of freedom at a significance level of (0.05). In contrast, the corresponding tabulated t-value for the same degrees of freedom and significance level is (2.045). This considerable discrepancy in t-values strongly suggests a significant result favouring the EG. Consequently, the third null hypothesis is convincingly rejected in favour of the alternative hypothesis. This outcome accentuates a statistically meaningful distinction between the pre- and post-test performances within the EG. The posttest results exhibit a remarkable improvement over the pretest results. These findings provide compelling evidence supporting the notion that integrating CTSs into the instruction of English literature has yielded considerable benefits for the participants, resulting in substantial academic progress.

4.4 The Fourth Null Hypothesis

“There is no statistically significant difference between the mean scores of the pretest and posttest in CTSs of the experimental group when dealing with short stories.”

Table (5): The Mean Scores, Standard Deviation and T-Values of the Experimental Group in the Critical Thinking (Short Story) Pre- and Post-test

<table>
<thead>
<tr>
<th>Literary Genre</th>
<th>Group</th>
<th>No.</th>
<th>Mean</th>
<th>SD</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Story</td>
<td>EG</td>
<td>30</td>
<td>3.6653</td>
<td>0.50401</td>
<td>35.395</td>
</tr>
<tr>
<td></td>
<td>CG</td>
<td></td>
<td>8.2445</td>
<td>0.49809</td>
<td>2.045</td>
</tr>
</tbody>
</table>

* Significant at ≤0. 05 level under (29) degrees of freedom

The findings presented in Table (5) provide unequivocal evidence, indicating that the calculated ‘t’ value stands at 35.395 with 58 degrees of freedom,
at a significance level of 0.05. In contrast, the tabulated t-value for the same degrees of freedom and significance level is 2.045. This notable difference in t-values strongly suggests a significant outcome in favour of the EG. Consequently, the fourth null hypothesis is rejected in favour of the acceptance of the alternative hypothesis. This outcome underscores a statistically meaningful distinction between the pre-and post-test performances within the EG. Remarkably, the posttest results distinctly surpassed the pretest results. These findings provide compelling evidence that integrating CTSs into instruction of short stories has led to discernible benefits for the participants, culminating in substantial academic advancement.

5. Conclusions

Following a comprehensive analysis of the data and rigorous hypothesis testing, the conclusions derived from this examination and ensuing discussion are as follows:

- The integration of CTSs into the teaching of English literature necessitates students’ engagement in higher-order cognitive processes. Subsequent to the intervention, students demonstrated an improved capacity to analyse, synthesise, and evaluate literary texts, thereby refining their CT abilities. Active participation in CT exercises and tasks heightened students’ abilities to think critically, establish connections, discern patterns, and construct logical arguments. Consequently, there was a significant enhancement in their CTSs.

- The superior performance exhibited by the EG in the posttest can be attributed to the specific instructional interventions implemented in their learning process. The EG received explicit instruction and opportunities for practice in CT, enabling them to proficiently apply these skills in the analysis and comprehension of English literature. Conversely, the CG adhered to conventional instructional methods that did not incorporate CTSs. The notable disparity in performance between the EG and CG underscores the added advantages conferred by a curriculum focused on CT education.
References


