

The Interplay of Writing and Thinking: A Study of Cognitive Development in the Students of Literature

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Abstract

This study explores the process of writing as a catalyst for actively giving structure to thinking and how thinking organizes and stabilizes through writing it down. Writing and thinking are so closely linked that they are considered practically twins. The relationship between these two processes is not linear but a recursive process, each fostering the development of the other. Those who are experts in writing are substantive thinkers. Similarly, intense cognitive apprenticeship enhances the quality of writing. Written language has structure, form and rules, but here, the focus is on structuring thinking through writing, which is more active than reading a passive process. The available research indicates the role of writing for literature students in enhancing cognitive stability. It also encourages vulnerable readers to engage in the deliberate practice of writing as their studies demand to think critically from every perspective, and it requires strong cognition, which is fostered through writing practice. So, this study determines that abstract thinking transforms into concrete, conserved and structured expression by writing. It is, therefore, assumed that writing is a well-stabilizing process. The method used for this study is a mixed-method approach that highlights the impact of literary studies on thinking abilities.

Keywords: Recursive Process, Cognitive Apprenticeship, Substantive Thinkers, Vulnerable Readers, Stabilizing Process.

Introduction

Writing is defined as creating a determined manifestation of human language. This encapsulates human thinking and conserves it in a concrete form. Human language, through writing, mirrors the writer's ideas, knowledge and emotions. Writing is the organization of symbols and structures which signify some meaning, and that meaning is the reflection of human thinking. Like Kellogg (2008) mentioned in his work, a 25% improvement is shown in critical thinking skills compared to those who do not engage in writing exercises. Thus, written text works as an outer emblem form of memory. Human consciousness is transformed by writing. In other words, something written may be re-read and reflected upon due to its physical form. Writing can be used very well for stabilizing processes. Written speech is expected to be both a completed thought, stabilized and conserved in a specific form and a flexible medium in that it is a possible starting point for new thought. It can be elaborated that every word amounts to a stabilization of thinking (Surd-Buchele, 2011). Thus, writing is a matter of expressing pre-existing thoughts and a process through which ideas are created, redefined and

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organized. The writer's thinking can be improved while externalizing on the page or another medium. The writing illustrates our clarity of how precise our thinking is and helps us see holes in our thinking, which is why the study of writing can be used to check the train of our thinking.

Recursive Process

The egg and hen relation paradox parallels the connection of thinking and language. Whether the egg or hen comes first is like whether thinking or language comes first. Thinking is like an unformed, unstructured egg in a non-creative form as a raw material, while written text is like a hen giving shape and meaning and turning it into a concrete, consumed form through which meaning is obtained. At first, thinking comes before language, as we have ideas before putting them into words. Moreover, writing helps us organize and arrange our thinking. In reality, these two processes are strongly dependent on each other. Thinking and writing are binding on each other. In this process, one often has to skim back to proceed onward. By assisting the students in becoming lucrative thinkers, we would make them capable of becoming proficient writers and vice versa (CB Olson), just like the never-ending cycle of the egg and the hen. Many people consider that depth and clarity of thinking enhance the quality of writing, which may not be readily apparent because writing is an illuminating tool for stabilizing and highlighting a thinker's cultivations. Writing is the most arduous activity of all human mental activities (Flower & Hayes, 1981).

Writing and thinking can be seen as synchronous with practicing the violin or any tunic instrument, which demands both melody production and tangible skills (Kellogy, 2008). Cognitive integration views cognition as based on the coordination of bodily processes, including neural ones and manipulations of external material vehicles that enable agents to complete mental tasks. The writing process requires tapping all the levels of thinking; the writer jots down an estimated set of ideas on a paper by brainstorming and assembling multiple concepts and thinking that are revolving in mind. To produce a composition, the writer must tap the memory to establish what they know and review and convert all the scattered thoughts into a logical sequence, construct a structural framework on the page, and transform a network of thinking into a written form with the help of cognitive skills. Finally, it is concluded that thinking is critical and poses challenges to our cognitive system for memory and thinking. As Moffitt (1981) commented, 'to play the whole range.' At last, when the writer coordinates the process, he produces a work that provides a pivotal level of cognitive control over the rearrangement and sifting of numerous representations by planning conceptual context and generating text.

A significant factor in this development of the material and cognitive task domain is the use of determined practice (Ericsson et al., 1993). For cognitive apprenticeship, one should focus on determined practice in developing intercession. I memorized and rewind to write by jotting it down. As we learn to write well, our thinking process becomes more precise and logical. Hence, writing involves multiple interpretation processes (Kellogy, 2008), where written text is seen as a vehicle to thinking (Menary, 2007) and creating these vehicles is part of cognitive abilities. An expert writer goes from a deliberate practice to achieving ability and mental development. All this discussion proves that writing and thinking attain shape, form, and structure. The structure moves thinking from the 'Mind map' phase to a linear phase. As seen from the emotive perspective, physical and mental health improves a person who transforms their feelings and emotions about emotional experiences. So, in the same way, writing about anything gives a structure to thinking from a cognitive approach. Hanim et al. (2020) said that one can improve one's thinking about a particular subject by writing about it. Without writing, the literate mind would not be and could not be able to recap as it does, according to Ong (2018). Kacewicz et al., (2007) has argued that because of how the world is moving, it became the need for learners to think critically. Students of Literature read multiple works, including

academic and non-academic, and their study demands them to think critically, for which they must ensure their cognition is strong. When a literary reader reads thoughtfully and with deep consideration, he starts to uncover every idea, every concept in his mind. In this regard, a survey conducted by the National Endowment for the Arts (2015) revealed that 58% of students experienced an overwhelming situation due to extensive reading and analysis.

Additionally, the vulnerable readers, those who overthink and are affected by personal problems, are the comprehensive readers who not only read but start linking with it as well, due to which various thoughts gathered in their minds. Pennebaker (1997) found that 40% of stress levels are reduced in individuals who go for expressive writing. This finding tests the emotional well-being that can be related to literary students. A book is a machine to think with.' Moreover, reading is a pleasure, but it is also a mental exercise and an intellectual practice (Orradre, 2023). It is essential to comprehend the hefty demand placed on learning memory and thinking processes because literature students have to analyze multiple perspectives that result in numerous revolving thoughts.

Statement of the Problem

Writing and thinking and their connection have been extensively studied in education and cognitive psychology. As it is generally explored that writing plays a vital role in arranging and solidifying thinking, there remains a gap in dealing with how this relation particularly supports students of Literature. Literature students are often demanded to delve deeply into extensive reading and complex analysis, which requires high cognitive strength. However, the cognitive burden caused by multi-dimensional thinking and emotional engagement in literary contexts can result in mental disturbance and emotional overload.

Significance of the Study

This research paper holds essential value for both academic and practical fields. At first, it enriches the existing understanding vessel by elaborating the synergetic connection between writing and thinking, particularly in literature studies. While previous studies have already acknowledged many cognitive benefits of the writing process, this work deeply sinks into the concept that writing can convert an abstract mixture of perspectives into physically arranged thinking that results in the proper structure of thinking, which is pivotal for students who read and absorb.

Secondly, from this research study's findings, educators and students can benefit. By knowing the cognitive advantages of writing, educators can outline various strategies for writing assignments that develop students' writing abilities and boost their mental stability and complex thinking skills. For readers, especially those who are vulnerable to cognitive stress and emotional overload, this research suggests a therapeutic solution in the form of writing to bring order to their thinking mechanism and abate cognitive overload.

Lastly, this study covers a gap in the literature by addressing the particular difficulties experienced by literature students, such as multiple perspectives and emotional involvement in studies, particularly fiction. By claiming various strategies to control these hurdles, this study can guide readers to build better cognitive strength and sentimental resilience, ultimately approaching improved academic presentation and mental well-being.

Research Objectives

1. To examine the role of writing in achieving cognitive development and stabilizing and giving structure to abstract thinking.
2. To explain the recursive process between writing and thinking as a Cognitive approach for the students of Literature.

3. To elaborate, literature students can achieve cognitive apprenticeship and foster their multi-dimensional thinking through writing.

Research Questions

1. In what way does writing become the source of cognitive development, and does it stabilize and give structure to abstract thinking?
2. For the students of Literature, How does the recursive process of writing and thinking work for achieving cognitive stability?
3. How can writing actively support literature students in fostering their multi-perspective and developing critical thinking?

Purpose of the Study

The core purpose of this research work is to highlight that writing in the process significantly impacts thinking ability. These two processes are compatible and synergistic, subsequently reinforcing each other. This study points out that the writing process catalyzes structuring and stabilizing thinking. Furthermore, it transforms thinking from a 'Mind-Map' phase to a 'linear' phase. It represents that writing is not merely a skill but a learning and cognitive tool which refines and clarifies our thinking and allows us to see gaps in our thinking. It adds that writing is an active process for gaining strong cognition, as it acts as a cognitive apprenticeship tool to enhance critical and multi-perspective thinking, which is required for philosophical, cultural, historical and psychological dimensions. Moreover, this study is significant as it provides a way, especially for literature students, to utilize this transformative role of writing as a stabilizing mechanism for deeper intellectual engagement and in organizing emotional growth. It affirms that deliberate practice of writing focuses on developing interventions and making an individual a substantive thinker. Most importantly, this research also addresses 'Vulnerable Readers,' those suffering from troubled states of mind and perplexed by unstructured thinking patterns. So, for those readers, writing is a therapeutic tool to organize their thinking in a structured form.

Literature Review

It is well documented that writing has deep influence on cognitive development. They are acknowledged as inter-winged process, with writing as an active cognitive process seen as a tool to highlight and refine thinking. Kellogg's (2008) writing research incorporates that deliberate practice of writing is foundational for cognitive abilities to established, emphasized that focus must not only be given to language generation but also to plan ideas and to coordinate these ideas, contributing a higher degree of self-regulation of cognition. In need to explain his idea he takes the example of a novice writer and elaborate that how a writer moves from different stages of writing to become an expert writer and from moving to knowledge telling stage to knowledge crafting he has to put a high degree attention towards cognitive control, so to arrange multiple representations and comprehensively plan ideas and context, this needs a sufficient executive attention. By explaining this struggle Kellogg puts emphasis on the phenomena that becoming expert writer is parallel to become expert in cognitive abilities. Menary (2007) explains this idea, by claiming that written sentences are vehicles of thinking enabling individuals to internalize abstract ideas that shapes the way of individual's think. Writing, as an active process of thinking restructures and make it recognizable to facilitate cognitive clarity. In other words, Menary directly considered writing is thinking, that the process of writing is itself a process of thinking. As well as it preserves and transmit thought. Educational theorists described the study of cognitive apprenticeship that considers writing as a skill developed to bring internal thinking out, making it analyzable and observed.

Surd-Buchele (2009) has conducted research on the same notion that writing and thinking are synergistic process mutually reinforcing, arguing that writing fosters a deep level of comprehension by analyzing, synthesizing and evaluating ideas. He by giving reference of Vygotsky modify that thoughts cannot be completely observed but written words can be assumed to mirror thinking in a specific form. Similarly, Hanim N Aripin, N.M Lin (2020) highlighted the importance of critical thinking in the present world, claims that writing is a mirror to consider multi-perspectives and organize their arguments. Vygotsky underscores in his work that human thinking consist of complex psychological functions such as thinking, formulating ideas etc which cannot be directly observe, whereby writing is a movement from word to thought and thought to word, focusing writing as thinking to organize and stabilize cognition.

“Writing Restructures Consciousness” by Ong (2018) further adds on this idea that human consciousness can be transformed to stable state by writing. Ong asserts that process of writing thinking on page reorders cognitive frameworks, suggesting writing as a well process to stabilize thinking. Writing plays a significant role in life of student of literature as it enhances multidimensional thinking. Multi-perspective thinking is the result of extensive reading whereby writing organize it in well-defined ideas. The literate mind, without writing would not think as it does Ong (2018). Broditsky (2010) characterized that an individual become a writer by nurturing critical thinking ability through writing practices (pre writing, writing and post writing). Flower and Hayes (1981) described writing as a most complex of all human mental activities. Therefore, better writers will be better thinkers and vice versa, furthermore discusses that writing is a point through which thinking is conserved in a specific form. He addresses that to create a composition a person goes from a procedure. They review, generate, organize, arrange in logical sequence, connect different ideas, focus and construct a structural framework which is the intended thinking process and this network transforms to written paper. In Moffett (1981) words that ‘To play the whole range’ which concludes that thinking is a critical process. Kellogy in his research mentioned that Lipman (1991) suggests that writing enhances both critical as well as creative thinking. It is essential to note that writing is not only for emotional stability in regard with expressive writing but according to Kacewicz (2007) expressive writing act as a medium to stabilize mental state offering psychological benefits. When an individual write he/she feel relax mental state and improvement in their behavior and in physical state. Thus, it contributes to the concept that writing gives a structure to thinking. Similarly, Kellogy quote from Horton (1994) that by writing about a particular idea one can enhance thinking ability and command on that idea. By writing thinking not only attain the Expression but also its form (Vygotsky). Comparatively, now considering the passive process of cognitive growth that is reading process. It can also affect intellectual, psychological, and social behavior (Karen Dali), most importantly of vulnerable readers. Those readers which think while reading, they unstructured every word which cause exaggeration of feelings and thoughts. ‘When reading means suffering’ by Alejandro Orradre consider the other side of reading where multiple interpretations are not seen as a pleasure but as a mental exercise and intellectual practice. As Paul Dirac, a famous physicist said that ‘I didn’t read, it interferes with my thinking’. Another scholar Harris and Hodges (1995) asserts that reading is the process to decode every sign, symbol and meaning that contributes to understanding. Hence reading as the decoding procedure proves that it is the passive process of cognitive development as it unstructured and again covert to abstract thinking. In book Don’t believe everything you think (pg.33) it is mentioned that it is not what we think that cause trouble but that we are thinking. So, to provide it a structure, writing moves thinking from ‘Mind map’ phase to linear phase. However, reading is fundamental but a passive process while writing is active process of engaging ideas and shaping cognition, suggesting that pivotal role of writing is essential with balancing reading for meaningful cognitive apprenticeship.

Research Methodology

Research Design

This paper has used an intermingled-method approach, digesting qualitative, quantitative, and descriptive research designs to meticulously overhaul the role of writing in cognitive development. It establishes the iterative relationship between writing and thinking and improves multi-dimensional thinking in literature students. The integration of these methodologies yields comprehensive insights and quantifiable data to analyze the impact of writing on cognitive processes, the organization of abstract concepts, and the enhancement of critical thinking.

Research Method

The qualitative aspect of the research incorporates comprehensive group discussions with literature students to elucidate their experiences with writing and cognitive processes. This approach makes it easier to examine individual opinions as well as the complex ways that writing influences critical thinking, emotional growth, and cognitive processes. However, by using surveys and tests both before and after writing, the quantitative component aims to assess how writing affects cognitive development. Moreover, the descriptive research method aims to trace the existing writing practices in literature courses and their impact on cognitive stability and multidimensional thinking.

The survey questionnaire has been used by the researcher. It includes Likert scale questions assessing students' impressions of writing as a means of organizing and stabilizing their thoughts, alongside open-ended questions encouraging attendees to contemplate their personal development and habits of writing. This survey questionnaire has aided the researcher to collect data from a substantial cohort of students, providing an overview of trends and patterns in the comprehension and application of writing for cognitive development.

Data Collection

Since this research has adopted a conglomeration of qualitative and quantitative data compiling methodologies. Survey questionnaires will be disseminated among participants to obtain extensive insights into the impact of writing on cognitive development. The questionnaires will feature Likert scale items designed to evaluate students' perceptions of writing as a mechanism for stabilizing and organizing their thoughts, in addition to open-ended questions that investigate their individual experiences with writing.

Participants

The study's participants comprise students from the 5th, 7th, and 8th semesters of the Department of English (Literature). These students were chosen because of their substantial experience in academic reading and writing. Students in the fifth semester are anticipated to be in the preliminary phases of their academic writing and cognitive growth. Conversely, students in the 7th and 8th semesters are more accomplished in their academic pursuits.

Analysis and Discussion

This study showcases the analysis and findings derived from the survey questionnaire and key observations. The chapter is categorized into thematic portions in regard with the research objectives, that focusses on themes e.g. reading habits, cognitive effects, challenges while studying literature etc. This discussion provides a comprehensive understanding that both qualitative and quantitative data integrates to present that how literary studies impact students' cognitive skills and academic growth.

The method used for this study is the combination of qualitative method with descriptive approach and quantitative method with survey questionnaire. The data collection through qualitative method is based on extensive reviews and obtain through theoretical framework of scholarly references that are dealing with the cognitive relationship between writing and thinking as students of literature have to analyze the text critically and to consider every possible dimension historical, cultural, psychological, philosophical etc therefore they need to think critically and deeply, while on the other hand data collection through questionnaire survey is conducted among the students of literature from 5th, 7th, and 8th semester. This mix method approach highlights the impact of literary studies in thinking abilities. The analysis incorporates these findings within the existing literature work and scholarly references, emphasizes their importance and significant impact.

Analysis of Questionnaire

Questionnaire is conducted to examine the reading habits and cognitive challenges faced by the students of Literature. The purpose is to explore that effect of literary studies and attitudes of the students of literature, to examine the cognitive effects, and identify the challenges they encounter during extensive reading. Furthermore, the questionnaire aims to observe the influence of literary studies on thinking process and cognitive development. Here are the results and observations;

Table 1: Frequency Table

Questions	Response	Frequency	Percentage
1. Other than academic books, how many hours do you spend on reading?	0 hours	3	10%
	1-2 hours	18	60%
	3-4 hours	8	26.67%
	5 or more hours	1	3.33%
2. Including both academic and nonacademic reading, how many books do you read in a month?	0 books	3	10%
	2-3 books	22	73.33%
	4-5 books	4	13.33%
	More than 5 books	1	3.33%
3. What type of reading materials do you engage with?	Fiction (novels, short stories, poetry)	24	80%
	Academic journals or research papers	1	3.33%
	News articles	1	3.33%
	Non-fiction books (biography, history, etc.)	4	13.33%
	Magazines or online articles	3	10%
	Other	1	3.33%
4. How many assigned readings or books are typically required for your classes per semester?	1-5	23	76.67%
	6-10	7	23.33%

	11-15	0	0%
	More than 15	0	0%
5. On average, how many hours per week do you spend on required academic reading?	Less than 3 hours	10	33.33%
	3-5 hours	8	26.67%
	6-10 hours	4	13.33%
	More than 10 hours	8	26.67%

Table 2: General Reading Habits and Effects on Cognition

Questions	Response	Frequency	Percentage
1. Other than academic course, I read a variety of genres and authors.	Neutral	0	0%
	Agree	23	76.67%
	Strongly Agree	7	23.33%
	Disagree	0	0%
	Strongly Disagree	0	0%
2. I often re-read texts/literature books to gain a deeper understanding.	Neutral	6	20%
	Agree	9	30%
	Strongly Agree	15	50%
	Disagree	0	0%
	Strongly Disagree	0	0%
3. I enjoy reading as a major activity.	Neutral	4	13.33%
	Agree	14	46.67%
	Strongly Agree	10	33.33%
	Disagree	2	6.67%
	Strongly Disagree	0	0%
4. I feel that my field of study encourages more extensive reading than other fields.	Neutral	2	6.67%
	Agree	13	43.33%
	Strongly Agree	15	50%
	Disagree	0	0%
	Strongly Disagree	0	0%
5. Studying literature has enhanced my capacity to understand different points of view.	Neutral	2	6.67%
	Agree	10	33.33%
	Strongly Agree	18	60%
	Disagree	0	0%

	Strongly Disagree	0	0%
6. I frequently participate in discussions or arguments that involve multiple perspectives.	Neutral	2	6.67%
	Agree	18	60%
	Strongly Agree	9	30%
	Disagree	1	3.33%
	Strongly Disagree	0	0%
7. Examining literature improves my critical thinking skills in everyday situations.	Neutral	2	6.67%
	Agree	11	36.67%
	Strongly Agree	16	53.33%
	Disagree	1	3.33%
	Strongly Disagree	0	0%
8. I face mental difficulties while studying literature.	Neutral	6	20%
	Agree	10	33.33%
	Strongly Agree	6	20%
	Disagree	1	3.33%
	Strongly Disagree	7	23.33%
9. Critical thinking required in Literature studies affects mental well-being.	Neutral	5	16.67%
	Agree	16	53.33%
	Strongly Agree	8	26.67%
	Disagree	0	0%
	Strongly Disagree	2	6.67%
10. I often catch myself overthinking or reflecting deeply on themes and ideas from readings even after completing them.	Neutral	1	3.33%
	Agree	17	56.67%
	Strongly Agree	12	40%
	Disagree	0	0%
	Strongly Disagree	0	0%

Table 3: Students of Literature and the Challenges They Face

Questions	Response	Frequency	Percentage
1. Students of literature read more intensively or extensively, a variety of text than students in other fields of study.	Neutral	4	13.33%
	Agree	18	60%
	Strongly Agree	8	26.67%
	Disagree	0	0%
	Strongly Disagree	0	0%
2. I often feel stress or fatigue from mental efforts required in our studies.	Neutral	9	30%
	Agree	11	36.67%
	Strongly Agree	7	23.33%
	Disagree	1	3.33%
	Strongly Disagree	2	6.67%
3. Studying literature has uniquely shaped my way of thinking, compared to those in other fields.	Neutral	0	0%
	Agree	17	56.67%
	Strongly Agree	13	43.33%
	Disagree	0	0%
	Strongly Disagree	0	0%
4. Compared to students in other fields, studying literature has made me a more frequent reader outside of academic needs.	Neutral	2	6.67%
	Agree	7	23.33%
	Strongly Agree	19	63.33%
	Disagree	2	6.67%
	Strongly Disagree	0	0%
5. Students of Literature may experience greater emotional or intellectual challenges due to exposure to multiple perspectives.	Neutral	1	3.33%
	Agree	10	33.33%
	Strongly Agree	16	53.33%
	Disagree	2	6.67%
	Strongly Disagree	1	3.33%
6. Literary text should be viewed from different points of views, adding different perspectives.	Neutral	1	3.33%
	Agree	8	26.67%

	Strongly Agree	21	70%
	Disagree	0	0%
	Strongly Disagree	0	0%
7. Multi-perspective nature of literature challenges cognitive development.	Neutral	1	3.33%
	Agree	19	63.33%
	Strongly Agree	9	30%
	Disagree	1	3.33%
	Strongly Disagree	0	0%
8. Discussing literature or other points allows students to meet with additional perspectives.	Neutral	2	6.67%
	Agree	14	46.67%
	Strongly Agree	14	46.67%
	Disagree	0	0%
	Strongly Disagree	0	0%
9. Students of literature should have multi-perspective nature of thinking.	Neutral	1	3.33%
	Agree	10	33.33%
	Strongly Agree	19	63.33%
	Disagree	0	0%
	Strongly Disagree	0	0%
10. Students of literature suffer more mentally than others.	Neutral	6	20%
	Agree	6	20%
	Strongly Agree	6	20%
	Disagree	6	20%
	Strongly Disagree	6	20%
11. I see writing as an essential tool for organizing and refining my thinking.	Neutral	2	6.67%
	Agree	16	53.33%
	Strongly Agree	11	36.67%
	Disagree	1	3.33%
	Strongly Disagree	0	0%
12. While writing about a concept, it helps me to deeply understand or find closure on the topic.	Neutral	2	6.67%

	Agree	15	50%
	Strongly Agree	12	40%
	Disagree	1	3.33%
	Strongly Disagree	0	0%
13. Writing is a more active process than reading for developing cognition.	Neutral	5	16.67%
	Agree	8	26.67%
	Strongly Agree	17	56.67%
	Disagree	0	0%
	Strongly Disagree	0	0%
14. Students feel relaxed while writing their thinking.	Neutral	2	6.67%
	Agree	8	26.67%
	Strongly Agree	19	63.33%
	Disagree	1	3.33%
	Strongly Disagree	0	0%
15. For students of literature, writing is the best platform to showcase or to structure their thinking.	Neutral	3	10%
	Agree	12	40%
	Strongly Agree	13	43.33%
	Disagree	2	6.67%
	Strongly Disagree	0	0%

Observations

General information

60% students spend 1-2 hours reading particularly non-academic books, mostly students (73.33%) read 2-3 books per month.

Reading preference

The preferred genre is fiction whose percentage is (80%).

Reading habits of literature student

76.67% students' response that they read a variety of genre, authors other than their academic course which shows that majority agrees, while 33.33% agrees that on academic reading they spend less than 3 hours per week.

Cognitive effect

Over 60% students strongly agree that study of literature effects and enhance their understanding level to consider different points of view (93.33%), and has a profound impact on critical thinking (90%).

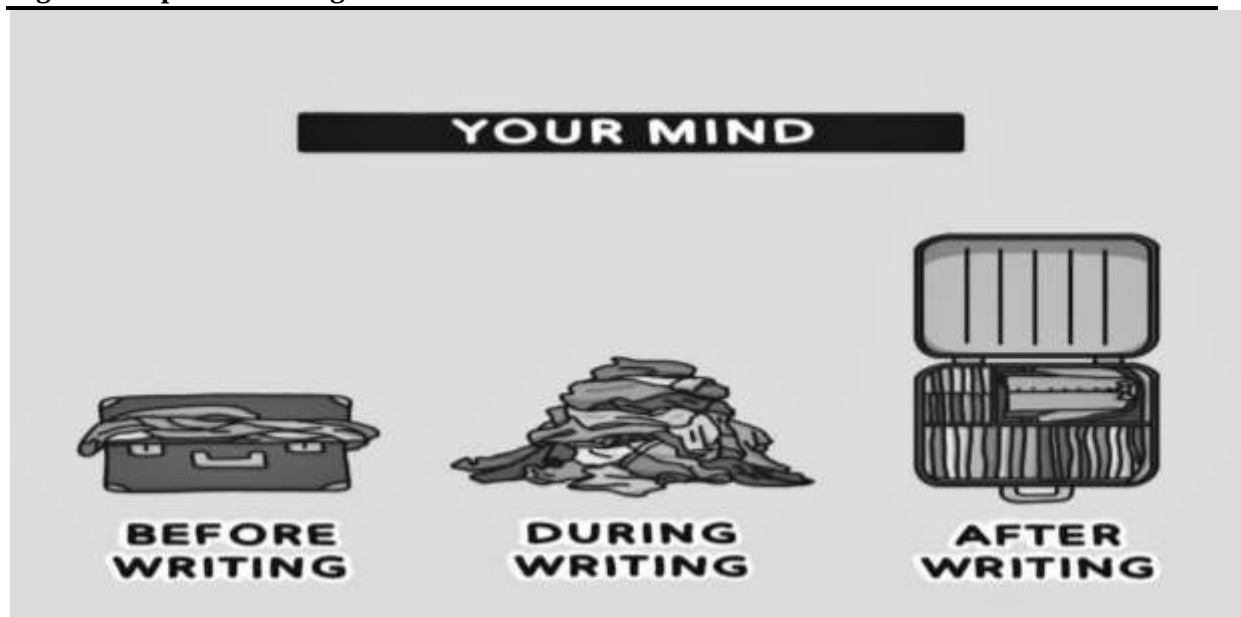
Studying literature and challenges

63.33% a significant portion of students strongly agrees that study of literature demands a frequent reader. However, 36.67% students feel stress and fatigue from their studies because mental efforts are required, while 30% feel neutral.

Literature students about writing

90% student agreeing with the role of writing in their life that it organizes, arranges and refines their thinking.

Figure 1: Impact of writing on mind



Findings

The available research indicates that both qualitative data and survey responses gained from students of literature reveal significant insights into three categories e.g. reading habits, cognitive challenges and role of writing in the lives of literature students. The main findings of this research are summarized as follow:

Reading habits

- Survey responses indicate that 60% students spend 1 to 2 hours daily on reading, mostly non-academic reading in which fiction is preferred compared to academic or non-fictional reading. Many students read 2-3 books per month. This result aligns with Kellogg's (2008) assertion that fiction affects cognitive stability by exploring complex perspectives and various narratives.
- Extensive reading is required in academic work, where 1-5 tasks (e.g. assignments, creative work) are often assigned per semester. Vygotsky (1986) analyzed that through reading fiction students internalize abstract thinking, which again can be organized through writing. This aid the idea that while reading is enjoyable, but it carries along cognitive pressure and emotional challenges.

Challenges and Cognitive Involvement

Mixed data is collected for analyzing cognitive challenges faced by the students of literature.

- 63.33% students agree that literature studies developed their cognitive skills to understand different perspectives in different situations. But 36.67% students experience stress and

burden due to overlapping unstructured thinking which aligns with cognitive demand that leads to mental fatigue as noted by Orradre(2023).

- During reading, students reflect on themes and ideas that lead them to re-think to get deeper understanding about literary concepts.
- According to results of survey a large number of students agree that writing helps them to achieve cognitive clarity due to which their understanding develops hence they agreed that writing is an essential tool to organize their thinking process.
- Kellogy (2008) and Menary (2007) references support the notion by explaining the compatible and synergistic relationship of thinking and writing through which cognition stabilizes, thoughts are externalized that fosters critical and creative thinking.
- Also, Vygotsky's theory of 'thought to word' aligns with student's responses, shows that writing is more active process than reading a passive process.

Challenges

Questionnaire data acknowledged that emotional stress and mental fatigue is faced by many students because of multi perspective studies. And this diverse and various multi-dimensional viewpoint leads to cognitive overload.

- Scholarly references such as Walter Ong's concept of 'Writing Restructuring Consciousness' explore how writing become an essential catalyst to organize the mind-map phase of thinking into stable structure.
- Extension reading accompanied with multi-dimensional thinking are more dangerous to mental health for which writing is the best solution to handle and to act like a medicine.

The role of writing

Quantitative data shows the students agreed that multi perspective nature of literature poses challenges to the way of their thinking engaging them intellectually which causes them to over think and over reflect. This involvement affects mental and emotional stability.

- 90% students claim that they know that writing is the best platform to showcase their feelings and thoughts, and it assist them to rearrange their thinking which directly helps them to attend cognitive growth. Writing transforms abstract ideas into a concrete structured expression.
- The qualitative approach used in this research also signifies the role of writing such as scholar Olson (1999) and Kellogy (2008) affirms that thinking skills and self – control regulation can be established through active process of writing. Where the findings also shows that 56.67% students accepts that writing is a more active process, reducing cognitive burden.

Conclusion

This research has provided understandings about reading and writing habits and their relation to cognitive growth. From findings of this study, it can be justifying that writing is an active process compared to passive process of reading, writing activity characterized and stabilize the revolving thinking which from abstract system transforms to conserved physical form and that gives relief because it comes to a structure which in other words can be said that thinking comes to structure through process of writing. It is already acknowledged by researchers that writing shapes thought but there is no discussion about structuring thinking. And this research paper fills gaps of existing research that focus on relationship of writing and thinking. Furthermore, writing is not merely used for communication purpose, but it has something more important connection with thinking and for achieving cognitive apprenticeship. This study helps students of literature to synthesize their ideas, develop critical thinking skills, sharpen their creative

abilities and externalize their themes through deliberate practice of writing. As students of literature should gained and develop these skills. Because students of literature suffer because of mental fatigue, emotional burden and overload on cognition as seen from the conducted questionnaire survey. The field of literature demands strong, developed cognitive skills as literature studies comprises of multi- perspective nature that broadens the intellectual but at the same time put pressure that should be carefully managed. Moreover, this research addresses specifically vulnerable readers to balance extension reading with reflective writing that results in emotional resilience and cognitive stability. Eventually, this research study bridges the gap between knowledge acquisition and intellectual composition. Ultimately, this study indicates that writing is worth mentioned process in journey of literate.

References

- Broditsky, L. (2011). How language shapes thought. *Scientific American*, 304(2), 62–65. <https://www.scientificamerican.com/article/how-language-shapes-thought/>
- Dali, K. (2014). On the danger of reading. *EBSCO Information Service*. <https://www.ebsco.com/blogs/novelist/dangers-reading>
- Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100(3), 363–406. <https://doi.org/10.1037/0033-295X.100.3.363>
- Flower, L., & Hayes, J. R. (1981). *The cognitive processes in writing*. Lawrence Erlbaum Associates.
- Hanim, N., Aripin, N., & Lin, N. M. (2020). Exploring the connection between critical thinking skills and academic writing. *International Journal of Asian Social*. <https://www.researchgate.net/publication/339483400>
- Harris, T. L., & Hodges, R. E. (1995). *The literacy dictionary: The vocabulary of reading and writing*. National Council of Teachers of English.
- Kacewicz, E., Slatcher, R. B., & Pennebaker, J. W. (2007). *Expressive writing: An alternative to traditional methods*. Springer. <https://psycnet.apa.org/record/2007-02845-013>
- Kellogg, J. R. (2008). Training writing skills: A cognitive development process perspective. *Journal of Writing Research*, 1(1), 1–26. <https://doi.org/10.17239/jowr-2008.01.01.1>
- Kellogg, R. T. (1994). *The psychology of writing*. Oxford University Press.
- Lipman, M. (2003). *Thinking in education* (2nd ed.). Cambridge University Press.
- Menary, R. (2007). Writing as thinking. *Language Sciences*, 29(5), 621–632. <https://doi.org/10.1016/j.langsci.2007.01>
- Moffett, J. (1981). *Teaching the universe of discourse*. Houghton Mifflin.
- National Endowment for the Arts. (2015). *How a nation engages with art: Highlights from the 2012 survey of public participation in the arts*. National Endowment for the Arts. https://www.arts.gov/sites/default/files/How_a_Nation_Engages_with_Art.pdf
- Ong, W. (2018). Writing restructures consciousness. In *Communication in history*. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781315189840-9/writing-restructures-consciousness-walter-ong>
- Orradre, A. (2023). When reading means suffering. *Medium*. <https://medium.com/@alejandro.orradre/when-reading-means-suffering-26a8e3eda2bf>
- Pennebaker, J. W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Science*, 8(3), 162–166. <https://doi.org/10.1111/j.1467-9280.1997.tb00403.x>
- Surd-Buchele, S. (2009). *Bilingualer Schriftspracherwerb*. Lehmanns Media.
- Vygotsky, L. S. (1986). *Thought and language*. MIT Press. <https://newlearningonline.com/literacies/chapter-14/vygotsky-on-thought-and-language>