Impact of integrated writing tasks on thinking and writing skills of Indian ESL learners

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Abstract

This paper explores the reciprocal relationship between thinking and writing skills using task-based language teaching. The tasks designed for a second language writing classroom must activate learners' working memory and provide scope for thinking and content generation. If the learners find the task to be more relevant, interesting and related to their experience, they automatically get oriented towards the task with a pleasant affective mindset. In this regard, writing tasks as a pedagogical tool and method have been employed to develop the thinking and cohesive writing of the students. The participants of this experimental study are the postgraduate students of National Institute of Technology (NIT)-Tiruchirappalli, India. The structured writing tasks have been administered in different discourse types to the students in a span of one and a half months. The delayed post task has been administered to test the sustenance level of their writing proficiency developed through the course. The findings of the study reveal that there is a significant correlation between task variables, students' thinking and writing skills. The results indicate that students' thinking skills have been empowered to develop the central idea logically and cohesively through an integrated writing task. The study recommends that researchers design writing tasks in which the students will be able to relate to their real-life situations, and in turn, content generation will become congenial for students to process in their cognitive domain.

Introduction

Writing is a recursive process that involves cognitive processes such as planning, preparing, drafting, monitoring and evaluating. Writing is a powerful tool necessary for thinking (Bruner, 1973). Writing enables the production of thought and is not just a way for students to express what they know, but it also helps them understand what they know. Effective writing requires a high degree of organisation in the development of information, ideas or arguments and a high degree of accuracy, and there is no ambiguity of meaning. Cognitive models of writing instruction involve practising the kind of thinking process that enabled the learner to become aware of the mental activities that characterise expert composing (Bereiter & Scardamalia, 1987; Cumming, 1989). According to Flower and Hayes (1981), the process of writing is a set of distinctive processes, which are hierarchically and highly organised thinking processes rather than a series of discrete stages. They further conceive that act of composing itself is a goal-directed thinking process guided by the writers' own growing network of goals. The generation of ideas in achieving the goal is affected by the writer's task environment and his/her associative ability with long-term memory to retrieve information for the present writing task. The long-term memory is comprised of a writer's task schema, linguistic genre and task prompt knowledge (Flower & Hayes, 1980).

Writing requires a lot of conscious effort on the part of students. So, it becomes mandatory for teachers to make the students understand the importance of writing skills and teach the nuances of writing effectively. Teaching students to write better is a form of teaching students to think better (Nickerson et al., 1985). Writing influences thinking and promotes learning, encourages personal development and forms connections to people and life (Axelrod & Cooper, 2010).

Need for the study

India had been a part of British colonialism, and English remains the language of power and prestige. English has a unique status in India as the associate official language of the country and is widely used for administrative purposes in both central and state government offices. It is the language of science and technology. It is also considered a language of education, especially at the higher education level. Although students started to learn English at their primary level, most of them find it difficult to write meaningful compositions in English. Composing here refers to expressing ideas, and conveying meaning and composing means thinking (Raimes, 1983). Despite the fact that they have been taught grammar, syntax, and lexical items till their tertiary level, they are not able to write coherently and are not able to relate their thoughts logically. It is observed from the responses of the students in the pre-study questionnaire during school education that most of them just memorise the notes provided by the teacher, or they depend on the bazaar guides and perform in examinations successfully. When they encounter a situation where they are asked to write on their own, the first constraint they face is 'what to write on the topic'. The reason is that they have not practised comprehending the topic and framing sentences on their own in their previous learning. When they come to higher studies, they find it difficult to comprehend the texts in English, writing assignments and project reports as it involves relating various concepts logically and meaningfully on their own. College students must increase their knowledge of writing and have the ability to write if they are to succeed (Andelt et al., 1997). So the study uses a task-based learning method to enhance the writing and thinking of the students.

Literature review

Writing and thinking

Writers use a set of distinctive thinking processes throughout the writing process (Flower & Hayes, 1981). This deep level of thinking during the writing process allows learners to explore the generative and inventive nature of composing (Zamel, 1983). In relation to that, Rohman (1965) suggested that the process of thinking is significant, as thinking precedes writing. Writing serves as a learning aid for students, helping "to focus students' think on a better understanding of the subject matter" (Miller, 1991, p. 519).

Writing is a complex cognitive activity that requires multiple skills, thought processes and affective components (Hidi & Boscolo, 2006). Applebee (1984) claimed that writing improves thinking, and it requires the writer to make his/her ideas explicit, to evaluate and choose among the available tools for effective discourse. Langer and Applebee (1987, p. 4) state that the role of writing in thinking can be conceptualised as resulting from some combination of:

(1) the permanence of the written word, allowing the writer to rethink and revise over an extended period;

(2) the explicitness required in writing if meaning is to remain constant beyond the context in which it was originally written;

(3) the resources provided by the conventional forms of discourse for organising and thinking through new relationships among ideas; and

(4) the active nature of writing, providing a medium for exploring implications entailed within otherwise unexamined assumptions.

Similarly, Resnick (1987, p. 49) emphasises that writing provides an opportunity to think in such a way that could serve as a "cultivator and an enabler of higher order thinking". In addition to that, Marzano (1991) suggested that writing is used as a means to restructure knowledge that improves higher-order thinking.

The domain of thinking and thinking skills are not the same. Beyer (1988) distinguishes thinking and thinking skills in the following manner: thinking is a holistic process through which we mentally manipulate sensory input, which is recalled as data to formulate thoughts, reason

about or judge, but thinking skills or strategies are very specific operations that we deliberately perform on data to accomplish our thinking goals. Vail (1990) describes thinking skills as a set of skills that direct a person's mental processes and include knowledge disposition, cognition and metacognition. Schaeffer (1900, p. 23) already stated, "the school master who teaches by rote is satisfied, if the pupils repeat his words or those of the book; but the true teacher sees to it that the pupils think the thoughts which the words convey". Most of the thinking skills challenges that college students demonstrate have their origin, at least in part, in academic settings that emphasise memorisation of isolated knowledge components, which are devoid of meaning, lack transferability, and are easily forgotten (De Sanchez, 1995).

Task-based language teaching

Task-based language teaching has a prominent place in second and foreign language teaching during the late 1980s. The early proposals (Breen, 1987; Candlin & Murphy, 1987; Long, 1990) are pragmatic in nature, and they focus on how to design a task-based curriculum. The seminal work of Prabhu's (1987) Bangalore Project provides a complete account of task-based courses. Nunan (1989) suggests the practical application of tasks in the second language classroom. Willis (1996) proposes stages involved in task-based instruction, such as a pre-task stage, a main-task stage and a post-task stage. Skehan (1998) mentions the following features of tasks:

1. Meaning is primary

2. Learners are not given other people's meanings to regurgitate

3. There is some sort of relationship to comparable real-world activities

4. Task completion has a priority and

5. The assessment of tasks is done in terms of outcome (p. 147).

Role of tasks in thinking and writing

Tardy (2009) defines a task as a "specific goal-oriented, rhetorical literacy events in both disciplinary and classrooms" (p. 11). She further adds that "tasks are critical because they present individuals with goals, constraints, exigencies, and social circumstances (p. 279). Task-based writing instruction encourages the students to be active participants and provides authentic learning environments, and also helps them to communicate competently in all second language contexts (Sholeh, 2020). Hedge (2005) records the responses provided by teachers from all around the world for assigning and preferring writing tasks in their classrooms. They said that they use writing activities:

- for pedagogic purposes, to help students learn the system of language;

- for assessment purposes, as a way of establishing a learner's progress or proficiency;

- for real purposes, as a goal of learning to meet students' needs;

- for humanistic purposes, to allow quieter students to show their strengths;

- for creative purposes, to develop self-expression;

- for classroom management purposes, as a calm activity which settles students down;

- for acquisitional purposes, as a careful mode of working with language, which enables students to explore and reflect on language in a conscious way; and

- for educational purposes, to contribute to intellectual development and to develop self-esteem and confidence.

Moreover, the learners can monitor their writing to a greater extent than they are able to monitor their speech; because writing is a more conscious process that involves the continual interaction of thinking, writing and revising (Zamel, 1982). It is perhaps true that writing is a more accurate indication of how a student is progressing in English, and it gives opportunities for teachers to diagnose the problem areas. Writing facilitates revising the drafts more than spontaneous speech performances, as it is a permanent record that can be documented and produced as evidence. Teachers can therefore exploit writing for learning in various effective ways. White (1981, p. 2) states that:

> Writing, unlike speech, is displaced in time. Indeed this must be one reason why writing originally evolved, since it makes possible the transmission of a message from one place to another. A written message can be received, stored and referred back to at any time. It is permanent in comparison with the ephemeral 'here one minute and gone the next' character of spoken language – even spoken language that is recorded on tape or disk.

In addition, writing tasks motivate all the learners to take part in the process of writing. While assigning speaking tasks, only few students dominate the speaking activities. But in the case of writing, it stimulates all the students to engage in the task and draft their own ideas. The process of writing will help the students involve in thinking process and it allows them to participate in generating sentences on their own.

Writing is not a naturally acquired skill and it is a challenging task for second language learners (Istiara & Lustyantie, 2017). It needs deliberate practice to attain mastery. William Irmscher's (1977, p. 34) definition of writing offers a valuable insight to understand the exact characteristics of writing.

Writing as a skill and writing as a form of behaviour make a practical difference in the kind of teaching that occurs. If we think of writing primarily as a skill, we tend to concentrate upon errors, because mastery of a skill implies eliminating weaknesses. If we think of writing as a form of behaviour, we tend to direct attention to psychology of the total act from beginning to end, including the errors.

Similarly, Janet Emig points out that writing is an active and lively form of learning compared to the more passive listening and reading that occupy much of a student's time. It can help students to act rather than to accept uncritically whatever is given to them (Emig, cited in Zemelman, 1977). Zamel (1983) conducted a case study with six advanced L2 students and concluded: "composing is a non-linear, exploratory and generative process whereby writers discover and reformulate their ideas as they attempt to approximate meaning" (p. 165). Also, the students of her study have understood that composing involves the continual interaction of thinking, writing and reviewing as well as the recursive nature of writing (Zamel, 1983). Raimes (1985) offers more information on L2 writers stating that they might not be "as concerned with accuracy as we thought they were, that their primary concern is to put down on paper their ideas on the topic" (p. 246).

Task quality determines effective writing practice and mastery of a second language. Task-based language teaching nurtures students' desire to learn to write, engage in learning and empower their writing (Yundayani & Ardiasih, 2021). Writing tasks enable the learners to fine-tune their writing and attain the required level of proficiency. The task introduced by the teacher must motivate, stimulate and create interest among learners. The tasks in second language writing classes are either real-world tasks, which are based on the learners' target communicative goals or pedagogic tasks that are designed to develop their genre knowledge and composing skills (Hyland, 2003). The aim of the pedagogical tasks is to promote the ability to write or increase the understanding of rhetorical forms. These tasks are selected on the basis of what the students need to know in order to build the competence required to accomplish real-world objectives at a later stage.

Similarly, if the learners attempt tasks in varied discourse structures such as personal experience, description, and generalisation as suggested by Jones (1985), it fosters their thinking and shatters writer's block. It stimulates the writer to think deeply about the topic they attempt to write. It helps to retrieve task-specific content from the repertoire without any hindrance. If they are able to recollect their thoughts in an organised manner appropriate to the context, it facilitates them to govern their own cognitive process.

Research questions

The study addresses the following research questions.

1. What is the role of tasks in improving thinking and writing skills?

2. Is there any relationship between content generation and thinking skills

Methodology

Sampling procedure

The convenience sampling method has been adopted for this study. Convenience or opportunity sampling is the most common sampling type in L2 research, where the members of the target population are selected based on certain practical criteria such as geographical proximity, availability at a certain time or easy accessibility. The specific research setting of this study is the National Institute of Technology, Trichy (NIT-Trichy), one of the premier educational institutes located in Tamilnadu (South India). The sample consists of 27 postgraduate students of the Department of Computer Applications, NIT-Trichy, comprising 18 females and nine males. These students have studied four semesters of General English (Basic / Foundation Course in English) during their undergraduate studies. Regarding the medium of instruction, 15 students have their education in the Tamil medium, and 12 students are from an English-medium background. Further, the students have also been in need of the course to improve their writing and thinking skills to attend placement examinations on and outside the campus. So the tasks have been designed to be efficacious in regulating their thought process and think in a unique way appropriate to the assigned task.

Tools used in the study

The questionnaire has been used as a basic research instrument in this study. A pre-study questionnaire has been administered to elicit the learners' personal and educational background, their learning styles, language skills and reference skills. The questionnaire comprising 50 questions has been framed with the following objectives. Part I (1-20) of the questionnaire elicits the personal particulars and Part II (21-50) of the questionnaire concerned with the students' view on the following variables.

- Reason for joining the course

- Use of English with friends and teachers

- Mode of preparation for examination

- Writing skills

A post study questionnaire has been administered to evaluate their improvement in writing and thinking skills.

Writing tasks as a pedagogic tool have been assigned to the students every day, and written corrective feedback has been provided by the facilitator for each task. Students' written samples have been used to assess their writing skills. Diedrich (1974) explains the reasons for the use of written samples to assess writing skills. He states, "as a test of writing ability, no test is as convincing to teachers of English, to teachers in other departments, to prospective employers, and to the public as actual samples of each student's writing,

especially, if the writing is done under test conditions in which one can be sure that each sample is the students own unaided work" (p.1)

Scoring procedure

This analytic scoring procedure has been used, as it helps to distinguish the students' deficiencies in each component for providing relevant and sufficient input to learners. In addition, the prime objective of the study is empowering the learners' content knowledge and thinking skills that, in turn, equips other requisite skills for fluent composition. So, the researchers adopt Jacobs et al.'s (1981) scoring criteria to assess the students' written scripts. The scoring profile has been divided into five writing components: content, organisation, vocabulary, language use and mechanics. The weightage for each component is content – 30, organisation – 20, vocabulary – 20, language use – 25, and mechanics – 5. Further, each component has been evaluated on a rating scale of very good to excellent, average to good, poor to fair and very poor. In this analytic scoring, maximum weightage has been allotted to content and least weightage to language mechanics. The rationale is that some learners could present unique content but would not be able to use language properly; some other learners might be accurate in mechanics but would be limited in content knowledge.

Previous writing experience

Learning in one context or with one set of materials impacts performance in another context or with another set of materials. (Perkins & Salomon, 1994). Leki and Carson (1994) also investigated how the learners' previous writing experience and instruction impact their current writing tasks. Questions 27, 36, 37 and 38 in the pre-study questionnaire deal with the participants' mode of preparation for examinations and these questions were asked to know whether the students:

- memorise the answers for the exam without comprehending the text;

- prepare answers through their own effort;

- depend on the teacher's notes;

- depend on bazaar guides

It is observed from the students' responses to the above questions in the pre-study questionnaire that their previous writing experience relies on memorising and reproducing the content. 51.9% of them have reported the same, and only five members have practice writing on their own due to the exam-oriented teaching method during their undergraduate studies.

Table 1. Learners' previous writing experience.

S. No	Variable	Frequency	Percent
1.	Memorise the answers for the exam without comprehending the text	14	51.9
2.	Depend on the teacher's notes	8	29.6
3.	Own answers	5	18.5

Implementation of tasks

In this experimental study, 20 tasks have been assigned to the students to improve their fluency in writing skills. The tasks have been designed in a way to prompt the learners to think, activate their cognitive domain, enable them to use their content schemata, select content from real-life experience, organise their thinking and draft cohesive compositions. The tasks have been proceeded from general to specific, and finally, the cycle ends with the general topic, comprising one general topic, two topics on their personal experience, one topic on description, one topic on analytical thinking, four single-word tasks, one task on using the given sentence as the concluding sentence, two tasks on using the given the sentence as the initiating sentence, three tasks on incorporating the given sentence in the paragraph and the next five tasks were on incorporating the given words or its derivatives. Students have been encouraged to share their opinions regarding "task relevance" – whether they are able to relate it with their real-life experience, "task difficulty" – difficulties in understanding the task requirements, generating content or language mechanics, the task which is more difficult for them to write and "task motivation" – whether the task motivates their inclination to write more sentences or induces their interest in attending the course and the same have been documented. In this manner, topics have been administered in a different discourse type with the motive of enabling them to compose a meaningful paragraph in any situation. The main purpose of these tasks is to enhance the learner's ability to write a paragraph coherently with a focus and to develop the central idea logically and cohesively. The prime requirement of composition writing is clarity of thought and how the learner is focused on a particular theme or idea to make the writing a unified whole. The paragraph is considered as cohesive, where a single proposition is properly developed. Jones (1985) also uses different discourse types to find the factors that constrain second-language writers. He has chosen topics such as "personal experience", "description", and "generalisation", and these insights were drawn from Pianko's (1979) L1 writing process study. Table 2 indicates the task assigned to students in each class.

Table 2. Tasks administered to the students.

S.No	TASK
Day 1.	Film Review (Tamil) & Write a paragraph of about 250 words on an *unforgettable experience* (English) in school/college life.
Day 2	General topic: *Bus Journey*
Day 3	Description: *Describe your campus: NITT*
Day 4	Single word task i. *Music*
Day 5	ii. *Festivals*
Day 6	iii. *Examination*
Day 7	iv. *Gold*
Day 8	Use the sentence as the concluding sentence *Finally he stood in front of the audience*
Day 9	Use the sentence as an initiating sentence *Television has completely changed the pattern of life at home*
Day 10	Use the sentence as an initiating sentence *Appearances are deceptive*
Day 11	Incorporate the sentence in the paragraph i. *That was when he realised why so many people believed Krishna*
Day 12	ii. *It happened quite naturally*
Day 13	Write a paragraph of about 250 words incorporating the following words and its derivatives i. *Eat, play, energy, concentration, hard work.*
Day 14	ii. *Act, consult, direct, final, satisfy, introduce, know, mediate, produce, revolve.*
Day 15	iii. *Wander, think, try, neglect, mind, prefer, monkey, logic, focus, thought.*
Day 16	iv. *Theatre, ticket, pocket, counter, picked, favourite, policemen, queue, balance, issue.*
Day 17	v. *Performance, interview, anxiety, studious, student, competitive, upset, confident, prepare, believe.*
Day 18	Write a paragraph of about 250 words on i. *It was a timely help indeed*
Day 19	ii. *It was a memorable day in my life.*
Delayed post-test	*I had a feeling that I would succeed in this attempt*

Results and analysis

The post-study questionnaire comprising 36 questions has been administered to know the strategies used by the learners to execute the task. Questions 1 to 4 elicited the basic information of the participants, such as name, institute, course and branch. This was followed by questions related to strategies pertaining to thinking and writing skills. Table 3 presents the average score (mean) and the standard deviation of each aspect concerning thinking and writing skills such as planning and organising, outlining, using background knowledge, succinct thinking and writing, speaking in English with peers and teachers and confidence in writing.

Planning and organising

Planning and organising are considered higher-order thinking skills (Bloom, 1956) that provide a comprehensive idea about the topic of writing. In the planning and organising stage, learners think and decide what they need to accomplish and how they intend to go for achieving it. The mean value of these variables in Table 3 (Mean=3.3) and (Mean=3.4) signify that the use of the higher order thinking skills such as planning and organising has been effectively applied while performing the task. Regarding planning and organising, one's procedural knowledge "has been shown to influence his or her choice of learning objectives and the criteria used for evaluating learning outcomes" (Wenden, 1998, p. 520). In the stage of planning and organising, the learners' cognitive domain has been activated, and it motivates them to associate their background knowledge

according to task relevancy.

Outlining

Outlining is a significant cognitive variable that enables the learner to compose and write an effective composition with sufficient ideas. This strategy helps the learner explore and write the content in a logical framework. In this study, 48.1% of the learners have 'always' used this strategy, and 13.3% of the learners have 'sometimes' made an outline before attempting the writing task. 11.1% and 7.4% of the learners have 'rarely and never' practised this strategy, respectively. The mean value (M=3.3) of this strategy shows that their ability to make an outline is at a good level. It is also found that the learners have created an outline in the right corner of their notebooks before proceeding with full-fledged sentences. Although the facilitator does not explicitly mention the strategy in the classroom, this writing practice stimulates them to use this strategy to execute the task successfully.

Using background knowledge

In the post-study questionnaire, questions have been asked to find whether the learners use their background knowledge and associate it with the task administered by the facilitator. Relating thoughts is an effective cognitive skill that enables the learner to retrieve the content from their schemata. The skill of using existing knowledge to present new content for the consigned topic is developed during the course. The responses of these variables in table 3 show that 59.3% of the learners have 'always' related thoughts and ideas clearly, 25.9% of the learners have 'sometimes' used this strategy and 11.1% and 3.7% of the learners have 'rarely and never' employed this strategy respectively. Further, 51.9% of the learners have always used their background knowledge while performing the task, and 44.4% of the learners have responded that they are 'sometimes' able to retrieve the appropriate content from the repertoire. Oxford (1990) also mentions the necessity of linking new information with existing schemata to produce the appropriate content. The mean value (M=3.5) of this variable illustrates that the learners' ability to use their cognitive domain has increased through this course.

Succinct thinking and writing

The ability to express thoughts clearly is a necessary tool for effective writing. The clarity in content is the foremost component expected in writing and spoken communications. 63% of learners in the present study state that they have 'always' produced content with clarity, 29.6% of the learners have 'sometimes' used this strategy, and 3.7% of them have 'rarely' and 'never' employed this strategy, respectively. So it can be inferred that they recognise the significance of succinct thinking and writing.

Speaking in English with peers and teacher

In this course, learners have been exposed to writing to learn the context in the classroom. Manchon (2011) opines that engagement in writing activities can contribute to learning to write and writing to learn. Although it is not the objective of this study, it is also observed that speaking proficiency has also developed, and they naturally use English with their peers and facilitator in the classroom. Researchers (Kohn & Vajda, 1975; Krashen, 1981; Pica, 1996) have established the fact that the use of L2 with peers and teachers will enable learners to progress towards fluency in the target language. In this study, the learners' use of this strategy improves their social cognition. 48.1% and 29.6% of the learners have 'always' attempted to speak in English with teachers and peers, respectively. 37% and 66% of the learners have 'sometimes' tried to use English with teachers and peers correspondingly.

Confidence in writing

A pleasant affective state plays a crucial role in the language learning process, as it encourages the learners to attempt the tasks with confidence. In this study, 70% of the learners have 'always' encouraged themselves that they can write well, 22.2% of the learners have 'sometimes' applied this strategy in their writing process, and 3.7% of the learners have 'rarely' and 'never' encouraged themselves in attempting the task. The use of this strategy automatically builds confidence in learners to a great extent. 77.8% of the learners have responded that they have 'always' had confidence in their writing and the mean value (M=3.7037) also labels the same.

Table 3. Descriptive analysis of writing and thinking strategies.

1-Always, 2-Sometimes, 3-Rarely, 4- Never

S.No	Name of the Thinking and writing variables	N	1 (%)	2 (%)	3 (%)	4 (%)	Mean	SD
1	Think comprehensively about the topic of writing	27	59.3	22.2	11.1	7.4	3.3333	.96077
2	Improving the organisation of the writing	27	55.6	33.3	11.1	-	3.4444	.69798
3	Concentrated and focused my thoughts and while writing in English	27	77.8	11.1	11.1	-	3.6667	.67937
4	I write with my own sentences	27	81.5	14.8	3.7	-	3.7407	.65590
5	Making Outline before writing the main content	27	48.1	13.3	11.1	7.4	3.3333	.83205
6	I am able to relate thoughts and ideas	27	59.3	25.9	11.1	3.7	3.5185	.70002
7	Using background knowledge while writing	27	51.9	44.4	3.7	-	3.5185	.50918
7	I am able to express my thoughts clearly and concisely	27	63	29.6	3.7	3.7	3.5556	.69798
8	Speaking in English with the teacher	27	48.1	37	11.1	3.7	3.4074	.69389
9	Speaking in English with the peers	27	29.6	66.7	3.7	_	3.2963	.46532
10	Encourage myself that I can do well	27	70.4	22.2	3.7	3.7	3.6296	.68770
11	I have confidence in my writing	27	77.8	14.8	3.7	3.7	3.7037	.66880

Paired samples t-test of first task and last task

A paired samples t-test has been conducted to compare the mean scores of the first task and the last task.

Table 4. Paired samples t-test of the first task and the last task.

Writing components	First task		Last task		t	P	Mean Difference
	Mean	SD	Mean	SD			
Content	18.1053	3.88580	26.4211	1.60955	-9.092	.00	8.3158
Organisation	11.4211	3.90606	17.2632	1.48482	-7.243	.00	5.8421
Vocabulary	11.3684	3.65945	17.0526	1.39338	-7.877	.00	5.6842
Language use	12.8421	5.66925	19.8947	3.12057	-6.546	.00	7.0526
Mechanics	2.9474	.91127	4.1579	.76472	-7.398	.00	1.2105

It is interpreted from Table 4 that there is a significant increase in the mean scores of each aspect of writing skill in the post task (p< .05). Regarding the content knowledge, the learners have found it difficult to produce appropriate content pertaining to topics in the pre-task. The mean score of content in the first task is M=18.1. The mean score has significantly increased in the last task (M=26.4). The mean difference (8.3) shows that the learners have improved their content knowledge in the due course. Similarly, they had shown considerable improvement in organisation, vocabulary, language use and mechanics, too. The mean difference of their skill of organisation, vocabulary, language use and mechanics are 5.8, 5.7, 7.0 and 1.2, respectively. On the whole, the learners' writing ability has substantially improved. The p value (0.00) of each component indicates that there is a significant difference between the scores of the first task and the last task. So it is inferred that learners' writing skills had improved and they were enabled to write comprehensively at the end of the course.

Sustainability of the learners' thinking and writing skills

Writing is one of the essential means for learners to communicate and develop their thinking skills. Thinking skills can be taught effectively by enhancing the content knowledge of the learner, and in turn, it provides a larger canvas for the learners to think on the focused content. Moreover, writing activities assist the learners in developing their ideas more effectively and motivate them to integrate new information with their previous knowledge and experience (Langer & Applebee, 1987). In this regard, learners have been trained to use and regulate their cognitive domain in this course. At the end of this experimental study, all the learners improved in their thinking and writing abilities considerably. In order to test whether the learners are able to sustain the knowledge acquired in the course, a delayed post-task has been administered after five months of the course. To statistically examine the learners' sustenance level, a paired samples t-test has been administered. There has been no considerable difference in the mean scores of post-task and delayed post-task in all the writing subsets. The p values are higher than the significant level 0.05. This reveals that there is no significant difference between the post-task and the delayed post-task. So, it can be concluded from the results that the learners are able to sustain the knowledge they have obtained from the course.

Table 5. Paired samples t-test of the last task and delayed post-task.

Writing components	Last task		Delayed post task		t	P
	Mean	SD	Mean	SD		
Content	26.7333	1.53375	26.3333	1.83874	.751	.465
Organisation	17.667	.81650	17.4000	1.18322	1.075	.301
Vocabulary	17.3333	1.11270	17.0000	1.25357	1.784	.096
Language use	20.4667	2.92445	20.0667	2.81493	1.702	.111
Mechanics	4.4000	.50709	4.4000	.63246	.000	1.000

Observations and discussions

The observation of ESL writing classes provided valuable data on learners' attitudes towards writing in terms of developing their writing skills. Marshall and Rossman (2006) state that observation "entails the systematic noting and recording of events, behaviours and artefacts in the social setting chosen for the study" (p. 98).

Outlining is a conscious cognitive skill that enables the writer to think about the topic. It motivates the learner to use their long-term memory to retrieve the most appropriate content for the topic. In addition, the strategy of using repertoire enables the learner to relate the ideas coherently and comprehensively. The use of background knowledge experiences in real-life contexts improves the content knowledge of the learner. The content knowledge is a significant prerequisite for meaningful composition "as form and language come from content" (Miller & Judy, 1978, p. 15). In this respect, the strategy variables influence one another in the writing process and facilitate the learner to compose cohesive writing.

Figure 1. Influence dispositions among strategy variables.

Task on first language (L1)

In the first class, students have been asked to write a film review in their first language. The task in the first language has been assigned to identify whether the learners' real problem in writing lies in language use or in content generation. Students' difficulties can be resolved by teachers with appropriate teaching strategies (Astrini et al., 2020). The rationale for giving the task of writing a review is to test their analytical thinking skill. It is an advanced and mandatory skill in which the students have been expected to analyse and present the theme properly with positive and negative aspects of the film, and also they have analysed the techniques like cinematography, characterisation etc. It is inferred from their draft that they have major constraints in how to select and organise the ideas cohesively. Some students have faced problems with how to start and what to write in the notebook. Content generation should be addressed prior to skills in mechanics. Rowan (1990) also carried out a study with 153 students, which focuses on the topic of knowledge for writing. The findings of the study conclude that there was a significant relationship between topic knowledge and the quality of thinking and writing.

Task on personal and real life experience

After completing their task on the first language, the learners have been instructed to perform a task in English on an 'unforgettable experience in school/college life'. The purpose of assigning this task is to retrieve their past experiences using their cognitive domain, and this would enable the students to think and write more since it is easier to write on a familiar topic that was stored in their repertoire. Johns (1997) suggests that selecting topics from everyday life to begin teaching is beneficial for the students as well as for the teachers. The constraint that has been identified in their writing is that they have written all the happenings they could remember in their school and college life. They have not focused on the unforgettable experience they have come across in the journey of their educational setting. 14 out of 27 students have narrated all the incidents, so the researchers promote discussion among the students to speak about the content they have written in their notebooks. She has not forced all the students to speak. Instead, she interacted with the willing students and demonstrated it to the rest of them. This strategy helps the learners to improve their speaking skills as they have appropriate content in their minds.

The next task has been on the general topic 'bus journey'. The intention of administering this task is to expose the learner to real-life situations. This would enable the learner to relate their day-to-day experiences to the writing task. The ability to associate ideas is one of the cognitive functions which induces the thinking skill of the learners.

Task on description

On the third day of the course, students have been asked to describe their campus. Description is one of the rhetorical features that has been considered as a higher-order skill which would enable the learner to use effective vocabulary to describe the amenities, infrastructure etc., of the campus. Task-based writing instruction improves students' descriptive skills (Ardika et al., 2021). This topic was selected because students have been well acquainted with the campus, and they could relate to the infrastructure and describe it fluently. Students have also reported that writing or describing their campus gives a pleasant experience and provides scope for both real and imaginary aspiring ideas of the campus.
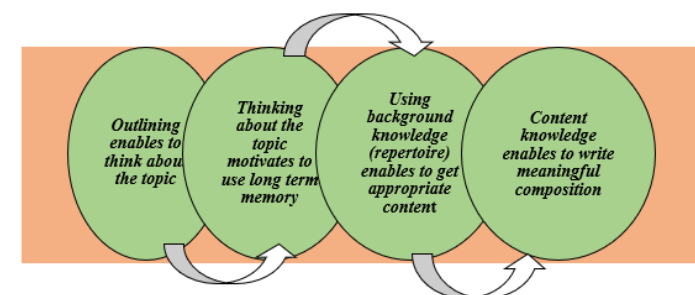
Single word task

The students have been assigned to a challenging 'single word' task on 'Music, Festivals, Examination and Gold'. They have more possible ideas to write, but they have to focus on a single idea for the given word. It also has paved the way to improve their organising ability. When they have been asked to write on the topic of music, 16 of them wrote on the theme that music is for relaxation. As a next step, the researchers have given guidance on how to think about different perspectives for the same topic and present unique content. They have been told of how to relate their background knowledge while thinking and writing on the topic. In the fifth class, before attempting the writing task, the researchers have administered an oral task on the topic 'Food' and discussed various possibilities of writing on a single theme. The learners have expressed their views such as "history of food, food and festivals, food and nutrition, varieties of food, food and culture, methods of cooking different types of food and food ingredients'. Such discussions have enabled the learners to think more and when they have been asked to write on the topic 'Festival' on the same day, they have spelt out ten different themes and they have been able to associate them with their outside experiences in their task. They have also started to relate their personal experiences appropriately to the given topic

Task on narration

The next six writing task on 'incorporating the topic sentence as a concluding sentence and an initiating sentence in the paragraph' has been selected with the motive of improving the narrative ability of the learners. This task also stimulated the learner to think from various perspectives and focus on a specific composition pertaining to the given topic sentence as concluding or initiating sentences, respectively. Their creative thinking has been activated, and even the low-proficiency learners create their own imaginative stories with confidence. All the students shared their stories enthusiastically in front of their classmates/peers without concentrating on their errors. They followed logical sequencing in their stories and excelled in using cohesive components. They have also shared with the facilitator that they have realised the fact that if they have expertise in selecting appropriate, critical and creative content effortlessly, they are able to use the language without uncertainties and anxiety.

Task on using given words and its derivatives

The consecutive five tasks on 'write a paragraph incorporating the given words or their derivatives' have been assigned with the aim of focusing the thought process of the learner within a framework. So, the learner could write fluently in the target language even when the thematic content is different. If they have been given the practice to think in a fashion of logical progression of thoughts, they could write meaningfully in all contextual themes provided to them. In the brainstorming sessions, the researchers explain the importance of writing and how they could think of an idea, develop it as a theme with focus and organise the content with logical progression of ideas. This is a cognitively complex task, which demands and restricts their thinking within the given words. The facilitator, after assigning the task, stood amidst the learners clarifying their doubts whenever necessary. She has been particular in maintaining an anxiety-free environment so that the learners have felt at ease in executing the tasks and approached her to discuss their doubts without any inhibition. The learners eagerly participated in the writing tasks assigned to them. The scope of the tasks is to make the learners focus on their expression of ideas. They have initiated to discuss their ideas and thoughts with the teacher during the interactive sessions. When they have not been able to progress with their ideas for the given task, they have asked the researchers how to go about developing a particular idea. Sometimes they have found difficulty in getting the right word to express their thoughts. The researchers have explained their clarifications in a comprehensible way.

The learners of this study attempt the task with thinking and planning, Outlining, thinking and organising, drafting, editing and revising. In brief, the process of writing contains a number of activities and the learners have effectively practised writing in a framework, as indicated in the following diagrammatic representation.
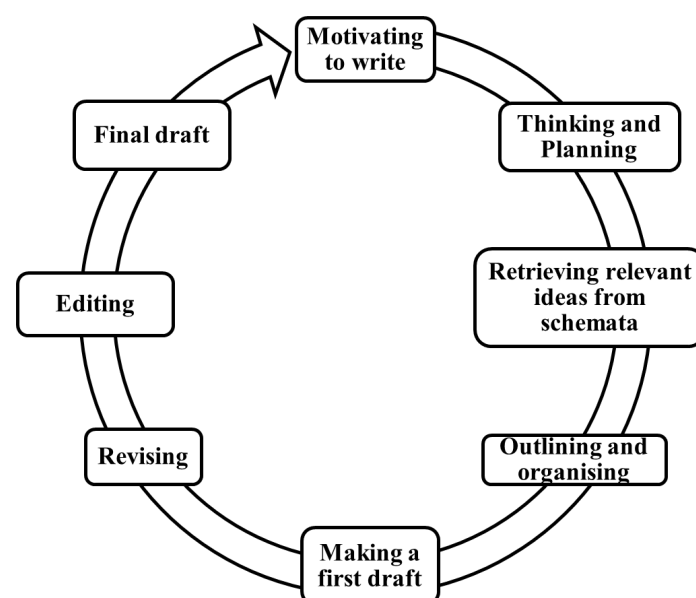

Figure 2. Diagrammatic representation of the writing process.

Conclusion

In the feedback session, students asserted that they have realised the importance of writing, and they have understood that writing has implications on the other productive skill, speaking. Writing skills serve as a thinking tool for the other three language skills and the components such as vocabulary, pronunciation and grammar (Khazrouni, 2019). It is inferred that the thought process for writing has enabled students to put forward their thoughts to speak as well. It can be proclaimed that improvement in thinking ability proceeded with thinking in different perspectives, enabling the learners to relate the outside experience for the assigned topic spontaneously. The learners' critical, creative and analytical thinking has also been promulgated through these tasks.

It is evident from this study that if teachers or researchers design cognitively demanding tasks for their writing course, it would certainly create a 'writing to learn' context. This kind of task execution corresponds with other skills such as thinking, writing, speaking and their subskills. It is also important to consider that organised content generation is prime and mandatory to attain mastery in all these skills. Further, this study suggests that task designers design tasks which have personal connections, promote quality thinking and add new information to the existing schemata.

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