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The Cummin's Modal and Task Cognitive Complexity: Enhancing EMI Students' Writing Skill by Implementing Frames and Self-Monitoring

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Abstract

This study examined the effect of using writing frames and post-collaboration self-monitoring strategies on improving EMI students' writing skill at the National Higher School of Artificial Intelligence. Twenty-one first year students were part of a repeat measure experiment in a six-week intensive writing course. The writing process was investigated in terms of sequencing task complexity following a multimodal input approach which takes into consideration both cognitive and linguistic demands. Results have confirmed the current view in the literature on the role of self-regulation skills and were compatible with the claim that findings on the direct effect of task complexity on the writing input are subject to discrepancy due to distinguished task implementation factors. Recommendations for further research emphasize design and implementation variables for writing tasks, a longer time span for the treatment and incorporating methods for identifying the effect of task complexity sequencing on output complexity, accuracy and fluency as part of investigating the writing process.

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1. Introduction

The prominent discussion of learners' writing performance assessment in English as Foreign Language (EFL) classrooms has taken place because of the growing interest in teaching English in Algeria. A current understanding of the available literature on the writing skill has shown that research foci revolve around assessing students' output with regard to linguistic aspects like accuracy and syntactic complexity (Frear & Bitchener, 2015; Johnson, Mercado & Acevedo, 2012; Kuiken & Vedder, 2012; Ong & Zhang, 2013; Rahimi & Zhang, 2018). The Competency Based Language Teaching (CBLT) was introduced in Algerian schools after the reform movement in 2002. Instructors who work with CBLT methods recognize that language is a means to communicate, and CBLT is unique in that it emphasizes and encourages students to start learning by doing, and demonstrate that they are able to use language to complete a real-world task (Richards & Rodgers, 2001).

The above-mentioned features of CBLT are shared by TBLT which "refers to an approach based on viewing TBLT as an approach that focuses on meaning rather than earlier structural approaches which consciously emphasized teaching forms (Ellis et al., 2019).

Nunan (2006) defines task as a piece of classroom work involving learners in an understanding, directing, producing or interacting way in the target language while the student's attention is focused on activating their grammatical knowledge in order to express meaning, and in which the aim is to express meaning rather than to manipulate form. The aim of the current paper is tackling the writing skill as a process leading to a product, not only on the final output which is intended for evaluative purposes. Since the writing process incorporates many strategies within its establishment, this study tackles the meta-cognitive strategy of post-collaboration self-monitoring and the use of writing frames. Introducing the latter considers writing tasks' cognitive complexity, mainly focusing on sequencing the cognitive and linguistic demands of the relevant frame to the essay type from simple to complex. Following a repeated measure experiment design, this study aims at tracking EMI student's progress producing written output in a six-week writing techniques course with a five-session weekly schedule.

1.1 Research Questions and Hypotheses:

RQ01: What is the effect of sequencing writing task complexity on students' written skill ?

RH01: Sequencing writing task complexity from simple to complex has a positive effect on students' writing skill.

RQ02: How does post collaborative self-monitoring skill affect students' writing skill?

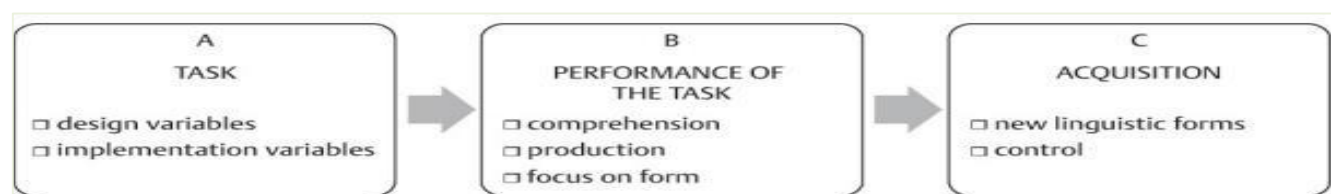
RH02: Collaboration with peer students at selected points of the writing process helps novice writers become aware of how to adapt the self-monitoring strategy feedback to foster their writing skill.

2. Literature Review

2.1 Task-based Teaching:

Research in task-based teaching had two main foci: the effect of task design and implementation variables on task performance (the link between A and B) and the effect of that performance on acquiring a second language between (B) and (C) as shown in Figure 01. Ellis (2015) has claimed that the link between task and performance of the task is in the core of current research, which investigated the task design and implementation's effect on input compression and output's CAF in addition to the inter-student interaction rising from performing the task

Fig.1. Tasks, Task performance, and Acquisition, Elis (2015)



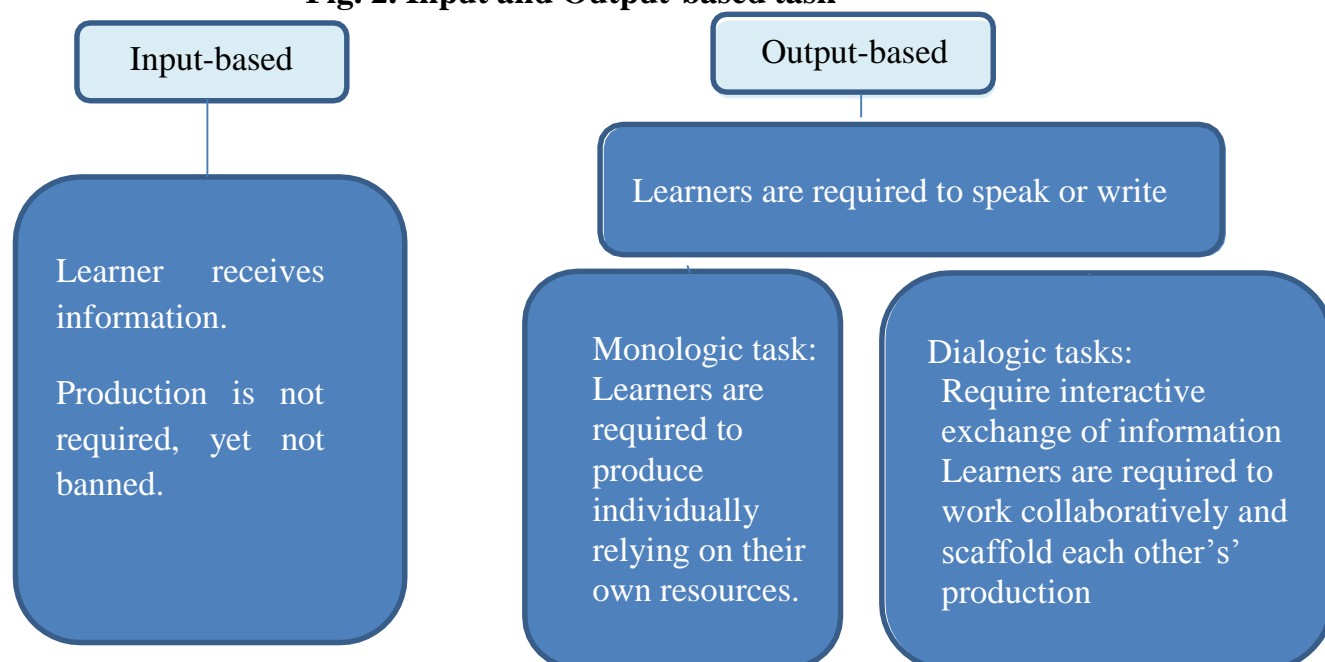
Source: Ellis, (2015), p. 290

2.2 Task Design : Criteria and Complexity Sequencing:

2.2.1 Task Criteria:

Skehan (1998) laid a solid foundation for defining a task from a pedagogical perspective by reflecting a broad consensus among researchers and educators. He suggests five defining criteria: A task is an activity in which: a) Meaning is primary, b) There is some communication problem to solve, c) There is some sort of relationship to comparable real-world activities, d) Task completion has some priority and e) The assessment of the task is in terms of outcomes. Additionally, Ellis (2015) has dichotomized tasks as follows:

Fig. 2. Input and Output-based task



On task categorization, McDonough and Mackey (2000) claimed that the aim of a task is to ‘provide learners with opportunities to engage in meaningful interaction and to direct their attention to form’ (p. 83). This claim prioritizes dialogic tasks with collaboration incorporated as they bring about improvements in the writing skill. Among others, the selected task criteria mentioned above call for speculations vis-à-vis their use. Task or syllabus designers, and even teachers in higher education are subject to conformity with a program covering already-set notions to cover with slight flexibility. However, the task we use in-class are of personal choice; accordingly, do we obey by some of the aforementioned criteria when we design tasks? Do we consider writing task-type compatibility with course nature, its objectives and the relevant materials used to support the teaching-learning process? All these questions call for serious attention and research acts.

Respective to output-based tasks since we are investigating the writing skill, and building upon what has been presented regarding the current local task-based teaching situation, attention is drawn to the design identification and implementation variables related to task performance. Ellis (2015) distinguished:

- *Design variables*: features of the task-as-workplan (the task materials)
- *Implementation variables*: the methodology of task-based teaching

Fig.3. Selected task design and implementation variables, Ellis (2015)

Design variables: task workplan	Implementation variables: task performance
1 Contextual support	1 Learners' role (i.e. listener vs interactive participant)
2 Number of elements to be manipulated	2 Pre-task planning
3 Topic familiarity	3 Time pressure
4 Shared vs split information	4 Rehearsal (task-repetition)
5 Dual vs single task	5 Post-task requirement
6 Closed vs open outcome	
7 Inherent structure of the outcome	
8 Discourse mode (e.g. description vs narrative)	
9 Here-and-now vs there-and-then	

Source: Ellis, (2015), p. 305

The presented variables accentuate task performance outcome, though design and implementation variables are incorporated, research questioned the prediction versus the actual linguistic outcome (Seedhouse, 2005). This raises a speculation whether designed tasks in Algerian EFL classrooms are compatible with those criteria and calls for rigorous analytical measurements.

2.2.2 Aspects of Written Production: Accuracy, fluency and complexity

Barrot and Agdeppa (2021, as cited Zhang et al., 2022) explain complexity, accuracy and fluency (CAF) as measuring aspects of linguistic proficiency. They have introduced studies which investigate the effect of independent variable on CAF, such as task type (e.g., Vasylets et al., 2017; Yang and Kim, 2018; Plakans et al., 2019).

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Similar studies on task complexity sequencing have been characterized by the study of immediate effect on CAF over a short time span. Yet, longitudinal studies are scarce, and that was the impetus behind emphasizing the possible effect on the long term. These aspects are used to measure the writing output which is relevant to the broader scope of the researcher, yet this study is an endeavor to direct syllabus designers and educators to the writing process within task-based teaching with integrating cognitive and meta-cognitive strategies like peer-collaboration and self-monitoring.

2.3 Task Complexity Sequencing:

Research in the area of task-complexity highlights the effect of cognitive task complexity on learners' task performance (Cognition Hypothesis, Robinson, 2007). When second or foreign language learners speak or write, their speed of production and complexity of their utterances will be affected in different linguistic domains by many factors such as anxiety, planning time, familiarity with the topic, genre of the tasks, learners' proficiency level, task type, task structure, task condition, and the degree of cognitive complexity of the tasks that they are trying to perform (Rahimpour, 2008). When task designers upgrade complexity sequencing, the process should cover and consider all these factors. Task complexity is a pivotal construct, referring to "the result of the attentional, memory, reasoning, and other information processing demands imposed by the structure of the task to the language learner" (Robinson, 2007a, p. 29).

A direct emphasis on cognitive and linguistic demands shifts our attention towards the multimodal input suggested by Cummins (1979). This modal tackles the writing task-teaching as a continuous process which lasts over a period of time, the case of six-week intensive program for the current study.

2.4 Implementing Writing Frames: Sequencing Cognitive Complexity via the Multimodal Input

Following the aforementioned limitations presented regarding Robinson's framework, and since the current paper is an attempt to draw attention into the process of writing as a whole and not solely the written final output, we introduce a multi-model input suggested by Cummins (1979) emphasizing the linguistic and cognitive demands of a course input. Using frames with regard to the multimodal input in part of an EMI Course the researcher has taken as part of training analogous to the integration in an English as Medium of Instruction setting.

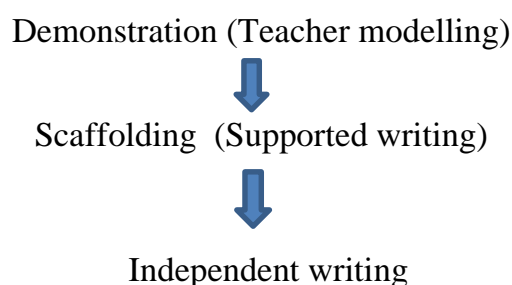
2.4.1 Introducing the EMI Course:

NILE Online is a platform offering training for teachers to "become an educational practitioner ready to support students in EMI contexts". The EMI Course aims at equipping teachers with "ways to guide your students' understanding and support their spoken and written output" (NILE Online EMI in HE, 2022)

2.4.2 Using Writing Frames

Writing frames are considered as a support for students' writing. The frame can be a "skeleton framework showing how to organize" the relevant essay. Frames can include clear essay sections with linguistic features particular to each section NILE (2022).

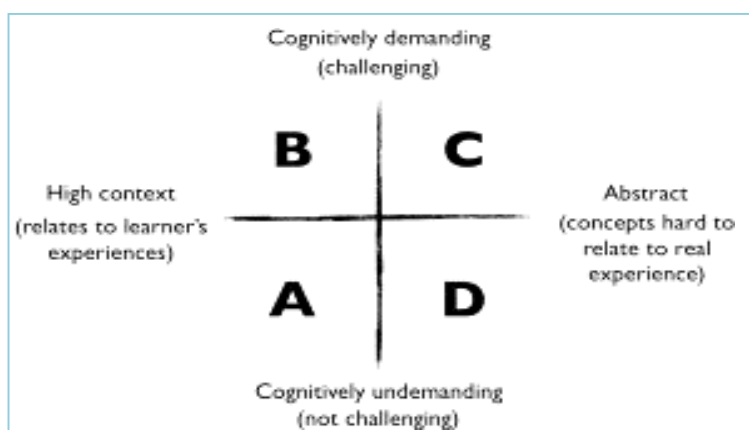
Graff & Birkenstein (2010) have argued that the model of teaching found to be most effective for using writing frames is summarized in the following:



2.4.3 The Multimodal Input:

As part of the EMI Course training the researcher has gone through a three month training on the NILE Online EMI in HE platform, the focus has been on the use of frames in teaching writing as output-tasks. These essay frames were introduced with respect to Cummin's multimodal input (1979). The researcher has organized output writing tasks via sequencing both cognitive and linguistic demands placed on the student to perform the task. Basic interpersonal communicative skills (BISC) and cognitive academic language proficiency (CALP) were introduced by Cummins (1979, 1981a, as cited in Cummins, 2008). CALP, as Cummins (1979) described, it is a "dimension of language proficiency which is strongly related to overall cognitive and academic skill" (p. 02). It also refers to "students' ability to understand and express, in both oral and written modes, concepts and ideas that are relevant to success" (Cummins, 2008, p.01). Considering Cummin's quadrant model, the writing course for EMI students has been delivered using writing frames of different essay types sequencing writing task complexity from simple to complex in terms of the cognitive demands to understand the frame combined with the linguistic demands needed to produce output.

Fig. 4. Cummins' Quadrant Model



Note. From *Cummins' Quadrants: Relevance and challenge*, by O. Quinlan, 2011 (<https://www.oliverquinlan.com/blog/2011/10/22/cummins-quadrantsmodel/>).

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The more contextualization is given, the more concrete and cognitively undemanding the input becomes. Conversely, the less context and therefore the more abstract the input is, creates higher cognitive demands (NILE Online EMI in HE, 2022). Relevant to the current study, writing frames were introduced using graphic organizers (contextualized), for example showing the writing process and the components of the cause-effect paragraph or the patterns of when writing a contrast or a comparison paragraph. Kellogg and Whiteford (2009) have argued that the literature on training interventions for teaching the writing skill for high school surpasses that of higher education, they have also noted that the same training is also appropriate for university students which is the case for first year students at the National Higher School of Artificial Intelligence (as cited in Wischgoll, 2016).

This view was adopted in the current research selecting interventions for the writing process which were reported to ease the demands of the tasks and act as preparatory for the output-task, namely pre-writing task and post-collaboration peer-feedback. Wischgoll (2016) suggests that combining these strategies would foster the writing skill:

- 1- Planning, revising, and/or editing as interventions in the writing process
- 2-The cognitive strategy of text structure knowledge (Labeled here as using writing frames)
- 3-The meta-cognitive strategy of self-monitoring executed, as the EMI Course explains, in a self-reflection task by students aiming to review learning

Figure 04 above represents Jim Cummins' model for thinking about language versus cognitive demands of lesson input. Input could be linguistically undemanding (quadrants A and B) or more demanding (quadrants C and D), each quadrant refers to the cognitive demands of the input based on the degree to which language and subject content is contextualized: each quadrant refers to the cognitive demands of the input based on the degree to which language and subject content is contextualized (e.g., using visual aids like graphic organizers).

2.5 Self-monitoring:

Self-regulation skills are important requirements university students need in order to improve their writing output (Chou et al., 2010). Self-monitoring occurs when students evaluate their own writing production identifying "compatibility or incompatibility with a mental representation of what the written text should be" and focusing on has been done wrong, editing takes place (Chou et al., 2010). Self-monitoring is expected to be a beneficial in-class task for novice writers as they will be guided into identifying their own errors and correct them along the writing process using revision and editing, and by that increasing the element of autonomy Cresswell (200). Autonomy is a newly introduced aspect in EFL classrooms; as practitioners in the field, we could agree upon students' reluctance to be active parts in the learning process as they got used to spoon-feeding and that is the case with first year students. Contributing to class discussion, giving peer-feedback and self-feedback are challenges for EFL teachers.

Self-monitoring as a cognitive process could be either implicit or explicit. Chou et al. (2006) illustrates implicit self-monitoring with checking your own production while typing an assignment or an important email. Amendments here, are based on your intended message or your goal along with your audience, and they could vary from minor spelling or typing errors to misuse of appropriate language in terms of formality.

As for explicit self-monitoring, it stems from students' task performance evaluating their own writing following a pre-set list of criteria. In this case, and to link this skill to peer-collaboration and feedback, the current paper investigates explicit self-monitoring using a self-reflection task before and after executing peer-feedback. Research linking self-regulation to the process of writing is scarce; it mostly revolves around behavioral psychology and teaching for the disabled learners (e.g., Chalk et al., 2005; Gureasko- Moore et al., 2007; Rafferty, 2010). This paper attempts to investigate the view that novice writers fail to self-evaluate their own writing and depict committed errors on one hand; and when doing so, they are limited to spotting grammatical or spelling errors (Chou et al., 2006).

3. Method

This research has been conducted adopting quasi-experimental research with repeated measures design with counterbalance order of treatment (as shown in Table 01), investigating the cause-effect relationship between the writing process, with respect to sequencing task complexity using writing frames. quasi-experiments could be "pre-experimental designs. Pre-experimental designs could use neither a control nor a comparison group" which is the case of the current paper which one group has received the longitudinal study treatment (Nunan, 1992, as cited in Rogers & Révész, 2020) in an attempt to draw causality conclusions between two variables. Since the writing process incorporates many strategies within its establishment, the current paper also tackles the combination of the meta-cognitive strategy of self- monitoring before and after peer-collaboration feedback.

3.1 Participants

This study targeted first year students at the National Higher School of Artificial Intelligence in Sidi Abdellah, Algiers. Participants are novice writers, who were taught writing techniques by the research as participant observer an intensive English program. The program lasted for six weeks with a five session weekly schedule. Participant (n=21) were highly ranked on their baccalaureate exam and had marks between 16 and 19 in English as Foreign Language.

3.2 Procedure

The research procedure has been organized into three phases:

3.3 First Phase: Pre-test Phase

At the beginning of the writing course, students were given a self-assessment questionnaire to fill.

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Questions targeted personal interests, perspective towards language skills and reported areas of difficulty. Students were introduced to academic language with reference to formality. Then the first course introduced the process of pre-writing using graphic organizer Check Textbook for detailed account: *Ever Green, A Guide to Writing with Readings. Writing to Generate Ideas* by Susan Fawcett, (2012). This writing task was both cognitively and linguistically undemanding (Cummins' Quadrant: A) since students have selected the writing topic and the writing task was guided with the pre-writing steps of a short free composition like paragraphs, also students discussed the relevant points before writing individually

A self-reflection task was given to students to monitor their performance before introducing the elements of a paragraph and re-applying the writing process. Self-monitoring here is used as pre-test where students use their background high school paragraph writing knowledge to write a first draft and then revise it, edit it and re-write a final output.

Second Phase: : Paragraph Writing in a Six-week Course treatment

The following is a detailed division of the treatment phase introduced in to separate parts:

Part One: The Writing Process in Paragraph Writing

The second phase of the procedure was giving a detailed account on paragraph writing, identifying its elements and covering different types of paragraphs using graphic organizer and paragraph writing frame (check textbook Unit 2: *Discovering the paragraph*, p. 18). Paragraph writing was introduced using writing frames as well in an attempt to familiarize students with different generic forms according to the type of paragraphs tackled (identical to the essay types shown on the Table 01 below).

Part Two: Essay Writing and Collaborative Feedback

The second part aims at identifying the effect of post-collaborative work feedback on students' self-monitoring skill and fostering their overall writing skill. The well-set organizational features of the textbook have facilitated the implementation of writing frames. The book structure offers a frame indicating essay sections and what to include in each (used for *teacher modeling*), then a sample with highlighted sections: (*Scaffolding or supported writing*).

This six-week repeat measure treatment was organized according to the diagram suggested by Graff & Birkenstein (2010), as the following:

Introducing the frame and discussing its organization Mapping the relevant frame over a sample essay which identifies its components: Demonstration (Teacher modelling). Following the multimodal input by Cummins (1979), both cognitive (CD) and linguistic demands (LD) needed for the use of the frame to produce the type of essay are from simple to complex. This sequencing targets the difficulty level of the frame structure itself and the linguistic repertoire necessary for production indicating a sequencing in the cognitive complexity of the writing task.

The author of the textbook (Susan Fawcett, 2012) has used an interestingly homogeneous way to introduce writing frames for essays, as she used that of the paragraph and expanded it to highlight it as a building block function of the essay. In the essay writing task, complexity of the task is manipulated as the following distribution:

Table 1. Essay-Quadrant Distribution

Essay types	Cummins' Quadrant Describing Difficulty level
Descriptive	A: Easy topics -CD; Basic linguistic Repertoire –LD
Process	A: familiar processes-CD; Simple linguistic Repertoire -LD
Compare/contrast	B: confusing Patterns for some +CD, same repertoire needed -LD
Cause-effect	B: Confusing outline with less details on components compared to the other essay types +CD, more lexical complexity to explain the cause-effect +LD
Argumentative	B: Confusing outline with less details on components compared to the other essay types +CD, more lexical complexity to explain the cause-effect +LD

Source: Adapted from Cummin's Quadrants, 1979

The paragraph writing process was then extended to essays. Using the same writing process steps given in the first phase, students outlined essays collaboratively (e.g., process essay), then exchanged their output for peer-feedback following an already set grid of criteria. Feedback is shared by a member of the group with the rest of class via a short oral presentation, simultaneously, the teacher takes record of the shared feedback on the grid which is displayed for the whole class then shares it at the end of each practice session : *Scaffolding (Supported writing)*.

Following every practice session, students are then asked to write their own essay individually and submit it as an assignment, where they have the time to reflect on the discussed peer-feedback (grid of criteria is shared). Individual output was subject to assessment based on outline (respecting the relevant essay feature), content and language: *Independent writing*.

Classroom observation was also conducted throughout the writing course. Aiming to depict students' attitudes towards implementing new strategies like the writing process, writing frames, self-monitoring, collaborative practice and peer-feedback. The researcher being the observer, maintained a written record of the relevant observations. The following phase in the last one in the presented treatment in which the researcher uses a post-test for self-monitoring.

Post-test Phase

After completion of the second part with an intensive practice on paragraph writing, students were given a self-monitoring task as a post-test. This self-reflection took the form of a checklist in which

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students were asked to evaluate their paragraph writing before and after the treatment phase. The checklist was instructive, no content was pre-set in an attempt to test students' self-monitoring performance after being subject to a set of evaluation on the grid.

4. Results and Discussion

The current quasi-experimental repeat measure research aimed at investigating the writing as process with integrating a set of cognitive and meta-cognitive strategies. The combination of the writing process, writing tasks with cognitive complexity sequencing using frames, collaborative feedback and self-monitoring was tackled as an attempt to shift attention towards research on the design and implementation of writing tasks, which is not as considered as research on writing output. Results analysis was carried out both quantitatively and qualitatively to demonstrate the expected cause- effect relationship

4.1. Pre-test and Post-test Results

The pre-test self-monitoring task was presented to students before the paragraph writing treatment. Students were asked to follow the pre-writing steps of the writing process in which they have outlined their production accordingly. The topic was of their choice and they have written a first draft, then self-assessed their output. The rating scale c for the pre-test was over 5 marks divided upon: respecting the pre-writing steps =1, content linked to initial jotted ideas =1 and self-correction remarks =3.

Pre-test Results:

Analyzing the first self-monitoring task results has shown students' unfamiliarity with the skill. Some students misunderstood instructions and skipped the self-evaluation section. Some students just corrected spelling and grammatical errors on the first draft with no comments on the edition and/or revising phase. These results were consistent with former research on self-monitoring among novice writer (Butterfield, Hacker, & Plumb, 1994; Sommers, 1980) as they focus on grammaticality and local word problems like spelling errors.

Others students' results have shown that they have disregarded instructions and they have answered selectively on less demanding parts of the task such as jotting ideas; recopied their draft and added sections in another color without identifying any errors, or underlining random words without revision or editing.

Post-test Results:

The post-test self-monitoring tasks was the second self-reflection task given to students after the six-week treatment. At that phase, students were familiar with the writing process and the paragraph components and they have gone through the collective feedback practice. So, the reported comments on their parts should at least cover four major relevant paragraph components or writing process steps in where each notion is scored with 1 mark and the overall best mark = 5. Results have shown a noticeable shift in the noted perspective towards self-monitoring on the pre- test. Before comparing tests scoring, it should be noted that students have manifested a positive attitude,

which was acquired with the course of collaborative feedback practice. Though, giving and receiving feedback was not well perceived by some students at first, working with their peers has assisted them get acquainted, as it was highlighted that getting involved in peer and self-feedback tasks aims at improving their writing skill (Cho, Schunn, & Charney, 2006; Shaw, 2002). Students have submitted well outlined and organized documents compared with pre-test. They used checklists to report errors referred to their errors using specific terminologies as opposed to long unstructured descriptive expressions on the pre-test. Positive and negative statements both used such as I “I ordered ideas from least to most important and used listing signals” and “I did not use a concluding sentence”. It was also noted that there were few references to grammatical errors as they have engaged in evaluating the writing output focusing on the paragraph outline and their comments were made upon meaning and not only on grammaticality (Sommers, 1980).

Table (02) below shows students’ pre-test and post numerical rating on 1-5 scale.

Table 2. Students’ Performance on the Self-monitoring task

Student	Pretest	Post-test	Difference score	Student	Pretest	Post-test	Difference score
S01	2.5	2	(+) 0.5	S12	1.5	3	(+)1.5
S02	1.5	2.5	(+) 1	S13	3	4	(+)1
S03	2	4	(+) 2	S14	2	4	(+) 2
S04	0.5	2	(+) 1.5	S15	1	3	(+) 2
S05	1.5	4	(+) 2.5	S16	1.5	3	(+)1.5
S06	3	4	(+) 1	S17	1.5	4	(+)2.5
S07	1.5	4	(+) 2.5	S18	2.5	4	(+)1.5
S08	3	4	(+)1	S19	2.5	0.5	(-) 2
S09	0.5	4	(+)1.5	S20	3.5	4	(+) 0.5
S10	2.5	4	(+) 1.5	S21	1.5	3	(+)1.5
S11	2	4	(+) 2	-	-	-	-

The table above shows that 19 students out of 20 participants had performed better in the post-test self-monitoring difference score on table 02 above confirms the explained shift in students’ self-monitoring task on the post-test. This confirms hypothesizing that collaborative feedback practice helps students acquire self-regulation skills (Chou et al., 2010).

4.2 Writing Treatment Observation Results

Observational checklist was used to collect data on the implementation of using frames as a writing task with cognitive complexity sequencing.

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As a participant Observer, the researcher was able to depict input perception, take record of questions and areas of difficulty as well as areas of distinguished performance.

Observing students has focused on the following criteria:

- As EMI students, participants are selective material-wise. The researcher focused on their attitudes towards the information delivered in different sample essays.
- Students' reluctance and contribution to group work, class discussion and individual questions in order to distinguish task perception from personality traits.
- The speaking-writing skills discrepancy among students.
- Time factor: as part of time management requirements, the participant observer keeps record of time distribution with respect to task load after the first week of interaction.

Investigating the effect of task complexity sequencing on the writing skill with regard to the previously mentioned strategies, necessitates a longitudinal study "employing repeated writing practice with feedback for revision" in an attempt to track the relevant effect.

This was recommended by Wischgoll (2016), who also indicates that these repetitive measures of writing tasks would equip students with autonomous reflection skills which will eventually, not only foster their writing skill, but enable them to gradually "gain a deeper understanding of which skills should be used, when, and why" (Wischgoll, 2016, future directions).

Table 3. Students' Performance across essay writing tasks

Student	Process	Comp&Cont	Cause/effect	Student	Process	Comp&Cont	Cause/effect
S01	2.5	2	3	S12	3.5	3	3
S02	3.5	3	3	S13	3	4.5	3.5
S03	3	4	4	S14	4	4	3.5
S04	3	2.5	2	S15	4	3.5	3
S05	3	2.5	3.5	S16	2.5	3	3.5
S06	3.5	2.5	3.5	S17	3.5	3.5	3
S07	4	3	3.5	S18	3	3.5	3.5
S08	1	1.5	3	S19	3.5	3.5	3.5
S09	2.5	3	2.5	S20	1	3.5	3.5
S10	3.5	3	2.5	S21	2	3.5	3.5
S11	3	2.5	3	-	-	-	-

Table 02 above shown students' scores on the essay writing tasks. The researcher has selected these three types as the descriptive essay was the first writing task and it paved the way for the process essay. As for the argumentative, most students did not prefer its structure, they reported it to be confusing and confounding with persuasive essay type. As the table show, we cannot clearly track a pattern in improvement across-tasks and between students.

Repeat practice experiment has enabled the researcher keep track of students' performance in the different writing tasks over a six-week time span. Students were at first reluctant to start from basic paragraph writing as they had a pre-assumption it was covered at high school, yet they quickly got immersed into the outlined lectures which was systematic for them. Keeping a constant teaching strategy helped them be acquainted with course preparation and practice sessions, this had an impact on time management as students knew what they are supposed to do next (NILE Online EMI in HE, 2022).

Using the modeling-scaffolding-production approach to teaching writing has contributed into creating an inside class order. Students would take the lead and take charge of discussing writing frames and the material used for the sample essay as means of encouraging autonomy in class. Sequencing writing tasks was discussed and students have engaged in explaining the link between the current essay type and the previous one. Taking the example of descriptive essays which share and pave the way for writing process essay as they both need linguistic items like adjective and adverb.

4. Conclusion and Recommendations:

The current paper introduced the implementation of cognitive and meta-cognitive strategies, namely using frames along with the writing process in combination with reinforcing the self-monitoring skill among novice writers aiming at fostering their writing skill. As part of task-based teaching strategies, the researcher has attempted to teach writing via writing tasks sequenced from simple to complex following a multimodal input approach, and implemented with the use of writing frames and collaborative work. Results have confirmed that students' awareness of the importance and the way self-monitoring is used affects their writing performance (Chou et al., 2010; Wischgoll, 2016), and since writing is a core linguistic skill, we also infer the importance of self-regulation skills for EFL learning.

Using frames has also proven to improve students' writing experience as it facilitates their understanding of the generic forms of the relevant input, taking into consideration the purpose and the audience for their written production. Introducing text structure enables students to formulate a systematic representation of the output they are intending to construct, especially for EMI students in technical fields like artificial intelligence.

Wischgoll, (2016) has confirmed the usefulness of structure knowledge as he put it, similarly the NILE Online EMI in HE (2022) has accentuated that implementing frames in teaching writing encourages students to establish successful writing experience. They have highlighted that regardless of individual differences, knowing how to start and supporting a student build up a written piece creates an equal and common ground for the whole class, which promotes self-esteem and motivates students to contribute with their peers.

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Sequencing task complexity on the other hand, taking into consideration cognitive and linguistic demands manifested as vehicle to facilitate input perception rather than a direct factor to improve the writing skill only. As results on the effect of complexity are subject to controversy regarding the writing output CAF, it is suggested to consider task complexity within task design and implementation variables (Ellis, 2015). Design tasks is founded upon and cannot be isolated from the course material and the way they are introduced to students taking into consideration cognitive and linguistic demands of the input (Cummins, 1979), which are recommended to be manipulated accordingly too. For implementation, collaborative work and self-monitoring skills inclusion accentuate students' role as interactive participants according to Ellis' (2015) task performance variables. Planning for the writing tasks and getting students to work together would ease the task demands put on the student as he won't perceive it as individual work pressure. As for rehearsal (task-repetition), the current repeat measure study has identified its usefulness in familiarizing the student within the writing-to-learn approach in task-based teaching classes accordingly to learning by doing (Richard & Rogers, 2001).

On the other hand, findings on the role of task complexity on CAF features of written output could be used as part of investigating the writing process for evaluative purposes, as they could give a good overview on the performance improvement targeting specific language dimensions. It is also recommended that future research would consider a longitudinal study of more than three months for better implementation conditions.

Normalizing the standardization of task- criteria in Algerian EFL classes is recommended, though it is still an ongoing plan, maybe did not even launch yet, and only with attempts like these to highlight their usefulness that we could establish teaching standards in foreign ELT contexts in terms of applicability and fostering results.

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