
RESEARCH ARTICLE

The Effect of Self-Regulated Learning Strategies on English as a Foreign Language Writing

Renad Ali Alhousayen¹, and Abdurrazzag Abdullah Alghammas² ✉

¹Department of English language and Literature, College of Languages and Humanities, Qassim University, Saudi Arabia

²Department of English Language and Literature, College of Languages and Humanities, Qassim University, Saudi Arabia

Corresponding Author: Abdurrazzag Abdullah Alghammas, **E-mail:** alghammas@qu.edu.sa

ABSTRACT

The present study examines the relationship between Self-Regulated Learning (SRL) writing strategies and writing proficiency among English as a foreign language (EFL) learners. This study also explores the size of influence that the SRL writing strategies have on writing performance for Saudi EFL learners. Online questionnaire as well as a writing test was conducted and a total of 50 (25 males and 25 females) Saudi English language majors' at Qassim University were involved in the study and answered the online documents. The questionnaire findings were analyzed statistically using SPSS while the writing test adopted a content analysis. The results showed that the respondents reported a medium level of utilizing SRL writing strategies. Furthermore, there was a positive relationship between using the SRL writing strategies and writing proficiency. The learners who used these strategies have been observed to have more writing length and potential depth. However, the analysis has shown that there were no significant gender differences in utilizing SRL writing strategies.

KEYWORDS

Self-regulated learning, L2 writing, Self-regulatory processes, writing strategies, writing proficiency, writing performance, EFL learners.

ARTICLE INFORMATION

ACCEPTED: 01 May 2025

PUBLISHED: 02 June 2025

DOI: 10.32996/ijllt.2025.8.6.4

1. Introduction

Many researchers have noted that some language skills are more difficult to acquire than others; writing in a foreign language is one such skill (e.g., Hayes, 2000, Manchón, 2009). Grammar, syntax, coherence, and first language (L1) transfer help to explain why achieving proficiency is difficult. Hayes (2000) defined writing as a multifaceted and complicated process that is affected by many variables, including the task environment, motivation, short-term memory, long-term memory, and cognitive processes. Writing involves cognitive processes because the writing process includes three primary cognitive functions, namely text interpretation, reflection, and text production (Hayes, 2000). Therefore, it is unsurprising to find a positive relationship between self-regulated learning strategies (SLR) and writing proficiency. SRL has attracted increasing attention among second language (L2) researchers because of its important contribution to academic accomplishments and strategy use (Andrade & Evans, 2013). Hadwin (2008, p. 175) defined SRL as the "deliberate planning, monitoring, and regulating of cognitive, behavioral, and affective or motivational processes toward completion of an academic task." SRL involves a triadic interplay among individual, behavioral, and environmental self-regulatory procedures that learners utilize when they accomplish a task. Personal processes include cognitive opinions, as well as motivational and affective conditions, whereas behavioral processes include physical actions, environmental processes, and physical and social settings (Zimmerman, 2013).

Constructing excellent written texts and becoming self-regulated writers requires the inclusion of SRL procedures, as well as competence and expertise. Developing SRL methods, writing competence and expertise poses significant problems for Saudi writers, who encounter difficulties in acquiring, using, and controlling advanced writing methods and competencies. These obstacles include limited knowledge of writing conventions, a lack of appropriate writing approaches, a lack of proactive planning, and insufficient motivation and self-efficacy. Furthermore, these challenges and difficulties have been attributed to the

predominant teaching practices, such as unsupportive learning environments, a lack of explicit strategy-based instruction, and the adoption of a teacher-centered approach (Al-Qahtani, 2016; Alenezi, 2021). The last approach increases the instructors' authority, dismisses the learners' autonomy, and decreases the students' motivation to learn. Therefore, there is a need to employ more relevant instructional approaches that could help students to achieve greater academic success and to produce strategic learners who are more self-efficacious (Cleary & Zimmerman, 2004; Zimmerman & Schunk, 2011).

To the best of the researcher's knowledge, there is very little research on L2 writing, and the number of studies of SRL in the existing literature is remarkably limited. More importantly, most of the research has been conducted in Western countries, and very few studies have taken place in the Arabian Gulf countries, particularly in Saudi Arabia (Abou Shaban, 2003; Hammad, 2016). It was also noted that only a few studies focused on SRL and strategy use (Abu Shawish & Atea, 2010).

The research questions that have been independently addressed in this study are as follows:

1. To what extent do Saudi EFL learners use SRL writing strategies?
2. Is there any effect of gender on using SRL and writing proficiency?
3. Do test scores differ significantly between students who use SRL strategies in their writing and those who did not?

2. Literature Review

2.1 Self-Regulated Learning SRL

SRL is an effective way to assist learners with different proficiency levels to improve their outcomes (Schunk, 1984). SRL has been proven to resolve concerns related to academic achievements when students struggle at school by alleviating issues such as underachievement and procrastination, which result in poor learning, poor performances, and high levels of dissatisfaction (Schmitz & Wiese, 2006).

SRL strategies are defined as the "processes whereby learners personally activate and sustain cognition, affects and behaviors that are systematically oriented toward the attainment of personal goals" (Zimmerman & Schunk, 2011, p. 1). SRL explains why learners can be successful or unsuccessful in an academic context regardless of their mental abilities by also considering their social and environmental backgrounds. Moreover, academic systems must empower students with learning strategies to improve their academic performance (Oxford, 2011). Ben-Eliyahu and Bernacki (2015) asserted that SRL entailed sequenced processes to enable learners to control both internal and external misdirection. Thus, SRL could affect subjective well-being, physical health, the economy, social interactions, and online schooling (Kizilcec et al., 2017). In the academic context, SRL has a tremendous impact on self-efficacy, motivation, academic performances, and conscientiousness (Pascoe et al., 2018).

In the context of L2 learning, L2 writers can improve their understanding of the expectations for their written work and can identify the reasons for learning to write to increase their motivation. Therefore, there is a large and increasing body of literature that examines the SRL strategies that writers use in their written work (e.g., Graham & Harris, 2000; Zimmerman & Risemberg, 1997).

Pintrich (1999) developed a framework for SRL based on Zimmerman's (1983) social cognitive model of self-regulation (Puustinen & Pulkkinen, 2001). Pintrich (1999) assumed that SRL directed the strategies that learners utilized to regulate their cognition, as well as to control resources; in other words, to utilize and control the environment. The author believed that self-regulation activities functioned as mediators among contexts, learners, and their general learning performances. SRL impacts on individuals' learning achievements because it is closely connected to the application of metacognitive resources. Pintrich (1990) focused on investigating learners' learning behavior, and examined the impact of learners' motivation on the implementation of cognitive, metacognitive, and self-regulated strategies for effective learning.

Pintrich and DeGroot (1990) asserted that there were important general categories of SRL based on the outcomes of several studies of SRL, namely:

- (a) learners' metacognitive strategies, which involve planning, monitoring, and evaluating the learning process,
- (b) learners' endeavors and persistence in learning. For example, learners will attain a high standard if they increase their level of engagement and spend more time on a challenging learning objective, and
- (c) learners' use of cognitive strategies in learning, memorization, and comprehension. Various cognitive strategies, such as practicing, explaining, and organizing learning content, can effectively improve learners' motivation to learn and can also enhance their learning performances.

Pintrich (2000) described the association between motivation and SRL from the perspective of goal orientation, and categorized goal orientation as mastery orientation and performance orientation. Mastery orientation requires learners to learn to utilize self-set goals to improve themselves, while performance orientation directs learners to learn in order to surpass others. "Pintrich's theory of goal orientation can be generalized in that it describes the individual motivation and its link with SRL. His framework for SRL involves learners' cognition, motivation, behavior, and context" (Cheng, 2011 p. 4). Several similarities between Pintrich's (2000) framework and Zimmerman's (1989) model have been found. For example, both of the models originated from theories of social cognition, and both define SRL as ranging from the stage of anticipation to the stage of self-reflection. Nevertheless, as Cheng (2011) stated, Pintrich's (2000) framework emphasized goal orientation in the research on SRL.

Boekaerts (1999) described SRL as a sequence of reciprocally associated cognitive and affective procedures that operate simultaneously on diverse elements in the information processing system. Boekaerts (as cited in Cheng, 2011) incorporated three different schools of thought, which were learning style research, research on metacognition and regulation styles, and the concept of self to construct a three-layered model of SRL theories.

The innermost layer of the theory involves the regulation of the processing mode, which indicates that learners select various cognitive strategies according to different learning materials or purposes. The middle layer of the theory is related to the regulation of the learning process, which refers to learners utilizing strategies such as planning, assessing, monitoring, and correcting in order to direct their learning. The outermost layer of the theory refers to regulation of the self, which concerns the use of the strategies of motivation control and willingness control, as well as the allocation of resources (Cheng, 2011).

Boekaerts (1999) categorized the functions of self-regulation according to two types with six components, each involving a type of previous knowledge; the first type is related to the self-regulation of cognition and the second concerns the self-regulation of motivation. The self-regulation of cognition is divided into content knowledge and cognitive and regulatory strategies, while the self-regulation of motivation is divided into motivational assumptions and motivational and regulatory strategies. Boekaerts assumed that self-regulated learners could manage their strategies or behaviors based on their intrinsic feedback, while non-self-regulated learners used new information in accordance with extrinsic regulations; Boekaerts' focus was on the cognitive strategies in SRL research.

2.2 Theoretical Framework SRL

The development of SRL can be traced back to the 1960s and 1970s, and has a variety of theoretical origins. The application of these approaches was conducive to significant research and to the development of practices in different fields and contexts. In particular, SRL flourished in the educational field, and enhanced the understanding of how learners regulated their behaviors. The importance of these contributions was supported by the findings of meta-analytical research, which revealed that learners functioned more effectively academically when they used SRL strategies, but functioned poorly when they did not use them. SRL assisted learners with diverse proficiency levels to improve their achievements, and was found to resolve issues related to academic achievement when students struggled at school by alleviating problems such as underachievement and procrastination that resulted in poor learning and performances, as well as high levels of dissatisfaction. Research has also shown that students who were provided with support in the form of SRL strategy interventions not only had higher academic performances, but also developed strategic behaviors and had more motivation (Boekaerts et al., 2000; Dignath et al., 2008; Schmitz & Wiese, 2006; Schunk, 1984; Zimmerman & Martinez-Pons, 1988).

Zimmerman and Schunk (2011, p. 1) asserted that SRL concerns "processes whereby learners personally activate and sustain cognition, affects and behaviors that are systematically oriented towards the attainment of personal goals." Several metacognitive strategies are used in the process of SRL, such as planning, establishing goals, and evaluation, to sketch out the understanding of learning tasks and to adjust plans, objectives, strategies, and endeavors. Metacognitive monitoring plays an important role in determining the discrepancy between learners' recent achievements and their preferred results (Hadwin et al., 2011).

SRL is the product of several theoretical viewpoints, including operant theory, phenomenological theory, social cognitive theory, cognitive models, volitional-based SRL theory, sociocultural theory, and constructivist theories. Despite this mixed origin, there are joint bases on which these theories depend. First, SRL requires learners' purposeful use of detailed processes, strategies, or responses to enhance their academic accomplishments (Zimmerman, 2001). Second, SRL involves a cyclical procedure of feedback in which students engage in monitoring how effective their learning processes are and how they use a combination of methods to respond to feedback. Third, the motivation for choosing particular SRL processes and how students choose them is a conjoint quality of SRL theoretical perspectives. Fourth, students require additional time to prepare, pay attention to their duties, and engage in tasks that yield sufficiently appealing results to self-regulate their academic learning (Zimmerman, 2001). Conversely, there are distinctions among these SRL theories in terms of the ways in which they conceptualize and reflect the theoretical and practical guidelines.

2.3 SRL and L2 Writing

In an SRL-based L2 learning context, L2 writers improve their understanding of the expectations for their writing by determining the logic behind learning to write as their motivation increases. L2 writers take more time and exert more effort to write effectively. Having a clear goal, understanding the intended audience, having a genuine interest in the writing topic, and engaging in authentic communication allows L2 learners to implement these aspects in their writing (Andrade & Evans, 2013). Learners' special interests, styles, requirements, and plans should be considered in the design of instructional contexts (Savignon, 1991). Learners can feel safe and unthreatened in an encouraging learning environment in which the teacher plays a less authoritarian role (Taylor, 1983). In this regard, teachers are not the only leaders in classroom performances, as learners can also participate (Allwright, 1984). Teachers play an important role in creating and maintaining students' motivation and including students' opinions about writing. Therefore, teachers are motivators and originators of information, recommendations, and guidance, as well as being providers of feedback (Harmer, 2004).

Teachers' roles in L2 classrooms have been debated in terms of whether a teacher-centered or a learner-centered approach should be followed (De la Sablonnière et al., 2009) to encourage L2 production and the development of communicative skills. This debate has been centered on the exclusivity of the method used rather than on inclusivity. Each method advocates for certain roles for the teachers and learners, and posits different benefits and costs. For example, facilitation has been noted as being the most useful role that a teacher can play by giving learners more room for selection, control, and management over their assessments in a learner-centered context (Perry et al., 2002). Learners in such a learning setting have the opportunity to communicate their emotions and control activities, thus resulting in SRL by controlling their emotions and being immersed in the learning context (Shanker, 2010). Understanding the learning process is essential for informing teachers' techniques and seeking to promote the students' inspiration, learning, and achievement. More emphasis is placed on individual learner's requirements, interests, skills, backgrounds, abilities, and experiences (McCombs & Whisler, 1997).

In teacher-centered instruction, teachers are considered to be transmitters of knowledge, whereby teachers' work depends on their learners' abilities, talents, and endeavors, and the students' accomplishments are at the forefront of the curriculum (McDonald, 2002). Teachers provide explicit instruction to teach learners task-specific procedures for the purpose of mastering more elevated levels of cognitive processes linked to language skills and SRL methods (Duffy & Roehler, 1982; Harris et al., 2011). Teachers' content knowledge is considered to assist learners in making connections in a situation in which little attention is paid to identifying learners' learning styles (Brown, 2003).

Accountability issues are important standards that teachers aim to meet, but which could often be at the expense of the students' learning requirements (McDonald, 2002). Crookes and Leher (1998) proposed a compromise in teacher-student negotiations whereby dialogue required the participants to allow novel directions in the instructional context. Teachers are instructed to listen to their students and to simplify the management of their learning challenges via the involvement of the class.

3. Methodology

3.1 Research Design

This research sought to investigate what SRL strategies Saudi learners used and those strategies' possible relationships to their writing proficiency. Since the study also examines gender-based differences in the usage of SRL strategies in learners' writing, it employed a convergent mixed-methods research design.

According to Creswell (2005), a mixed-methods design integrates both qualitative and quantitative research techniques and data analysis, and while all methods have limitations, the intrinsic biases of a solely quantitative or qualitative approach might be compensated for in a design that combines them. By incorporating the strengths of each research paradigm, this mixed-methods approach allows researchers to better identify patterns in the area and topic of research. More specifically – and as a fitting choice for this study – Creswell and Clark (2011) describe that a convergent mixed-methods research design involves the simultaneous collection of quantitative and qualitative data, a separate and independent analysis of the data using typical quantitative and qualitative procedures, and an interpretation of the data based on how the two data sets converge.

3.2 Instruments

3.2.1 The Questionnaire of English Writing Self-Regulated Learning Strategies (QEWSRLS)

The Questionnaire of English Writing Self-Regulated Learning Strategies (QEWSRLS), developed by Sun and Wang (2020), is used in this study to estimate EFL learners' use of SRL strategies in writing. The questionnaire comprises 26 items divided into three sections covering environmental, behavioral, and personal SRL strategies adopted and modified from Zimmerman and Risemberg's (1997) writing self-regulation paradigm. The environmental section is divided into three subsections: seeking assistance, persistence, and review of records strategies; likewise, the behavioral section also includes three subsections: seeking opportunities, self-monitoring, and self-consequences strategies. The personal section includes self-evaluation, organization, transformation, goal setting, and planning strategies (see Appendix A).

3.2.2 Writing proficiency test

To measure the participants' writing proficiency, the researcher administers the International English Language Testing System (IELTS) Writing Task 2, which requires learners to state their opinions about a subject or to suggest a solution to a problem (Lougheed, 2008) (see Appendix B). For this task, participants are required to write 250 words in 40 minutes, and their writing will be evaluated based on four criteria: task response, coherence and cohesion, lexical coherence, and grammatical accuracy (see Appendix C). Specifically, IELTS Writing Task 2 requires that the students construct arguments and defend their ideas. In Task 2, the students must adopt and support a specific perspective, which requires them to be aware of knowledge related to that topic and then select words reflecting the appropriate meanings to support their stance. These procedures are important in measuring students' success at writing essays, which is a difficult task for L2 writers. Considering the importance of self-regulation when the

students complete challenging tasks (Greene & Azevedo, 2009; Crowhurst, 1990; Schleppegrell, 2004), Task 2 was selected to help answer this study's research questions.

3.3 Selection of the Subjects

The participant comprises 50 (25 male and 25 female) undergraduate students in four English Composition II and III classes at Qassim University, all of whom have a first language of Arabic. The participants' ages range from 19 to 23, with a mean age of 20. The instructions for participating in this study clearly emphasize that the participants must be Saudi and have studied in public schools; those who studied in private schools or lived abroad were excluded from participating in this research. In addition, the participants broadly share the same educational and cultural backgrounds with minor personal and regional differences, which ensures that the sample receives the same input, and that the reliability of the collected data will not be affected by any variable.

3.4 Data Analysis Procedure

The study includes two phases. In the first, students respond to a survey adapted from the QEWSRLS, developed by Sun and Wang (2020); in the second phase, the participants take a writing proficiency test (IELTS Task 2).

Using SPSS v30, the survey data are analyzed in the following steps: First, descriptive statistics (mean and standard deviation) are computed from the survey outcome to determine which SRL strategies Saudi female language learners use when writing. Second, a chi-square test for independence is employed to examine the relationships between the variables for SRL. Third, Cronbach's alpha values are derived to investigate the consistency of the survey items.

Table 1. Reliability Test

Cronbach's Alpha	N of Items
0.87	26

Reliability analysis was performed to assess the internal consistency of the 26-item SRL questionnaire. The Cronbach's alpha value was calculated as 0.870, indicating a high level of reliability. This suggests that the questionnaire items effectively measure the underlying construct of SRL strategies. The high-reliability score ensures confidence in interpreting the survey data and its use in understanding participants' SRL behaviours. Furthermore, a chi-square test is used to determine whether there are significant gender differences in utilizing the SRL writing strategies.

In this study's second phase of analysis, the writing proficiency test results are evaluated in two ways. First, the proficiency test is used to assign a writing score baseline. Second, the study employed content analysis to investigate the use of self-regulated learning (SRL) strategies, identify thematic trends, and also assess writing proficiency. The design allowed for a structured exploration of how SRL strategies correlate with linguistic attributes and thematic content, providing a nuanced understanding of cognitive and reflective writing processes.

4. Results & Discussion

4.1 Results of Research Question 1

Answering research question 1 involved conducting a statistical analysis of the quantitative data. The categorical variables in the dataset were transformed to ensure accuracy and enable statistical analysis. Responses from the SRL questionnaire, which were initially in textual form (e.g., "Strongly Agree," "Agree," "Neutral," "Disagree," "Strongly Disagree"), were recoded into numerical values on a Likert scale ranging from 1 to 5, where 1 represented "Disagree" and 5 represented "Strongly Agree" using in excel tool. Similarly, the variable for gender, initially recorded as "Male" and "Female," was converted into numerical codes (1 for Male and 2 for Female) to facilitate analysis in SPSS. These edits ensured that the variables could be analyzed quantitatively, allowing for the computation of descriptive statistics, chi-square tests, and t-tests and ensuring the interpretability of the original data.

Table 2. Questionnaire of English Writing Self-Regulated Learning Strategies (QEWSRLS)

Scale	N	Min	Max	Mean	Std
1- I check my English composition before turning them in.	49	1	4	2.96	0.735
2- I write an outline before writing English compositions.	49	1	4	2.73	0.758

3- I consult teachers when I encounter difficulties in my English writing.	49	1	4	2.98	0.878
4- I keep writing when I encounter difficulties in English writing.	49	1	4	2.73	0.811
5- I use sentence patterns and just learned to make new sentences for practice in writing.	49	1	5	3.78	1.159
6- I write down the mistakes I often make in the process of writing.	49	1	5	3.37	1.349
7- I reward myself when I make progress in writing.	49	1	5	3.78	1.141
8- I set a goal to improve my writing.	49	1	5	3.8	1.099
9- I review English texts I have learned before writing.	49	1	5	3.69	1.025
10- I proofread my English composition after I completed writing.	50	1	4	2.82	0.72
11- I think out a composition in Arabic before writing it in English.	50	1	5	3.1	1.249
12- I ask classmates when I have questions about my English writing.	50	1	5	3.5	1.249
13- When a friend wants to play with me, but I have not finished my writing yet, I do not play until I finish.	50	1	5	3.76	1.238
14- I send emails to friends in English on my initiative.	50	1	5	2.94	1.331
15- I take notes in English writing classes.	50	1	5	3.8	0.948
16- I have a break when I am tired during writing.	50	1	4	3.18	0.825
17- I make a plan in the process of English writing.	50	1	5	3.68	1.058
18- I review my notes of English class before writing.	50	1	4	2.72	0.904
19- When I finish my English composition, I have a rest and then read it again to check whether it should be revised.	50	1	5	3.98	0.892
20- I make sure to write a topic sentence in each paragraph in writing.	50	1	4	2.94	0.867
21- I search related documents when I have difficulties in English writing.	50	1	4	2.68	0.819

22- I find a quiet place to write when the environment is disturbing.	50	1	4	3	0.833
23- I try to use various English expressions to express the same meaning in writing.	50	1	5	3.84	0.934
24- I make sure that the content of each paragraph supports its topic sentence in English writing.	50	1	4	3.18	0.774
25- I use words just learned to make new sentences on my initiative in writing.	50	1	4	3.1	0.863
26- I pay attention to the English language structure during writing.	50	1	4	3.18	0.72

Table 1 shows valuable information on participants' frequency of SRL strategy use. The means and standard deviations of the 26 items indicate the strategies that are most and least utilized. The highest mean score was observed for the strategy "When I finish my English composition, I have a rest and then read it again to check whether it should be revised" ($M = 3.98$, $SD = 0.892$), highlighting the participants' awareness of the importance of reviewing their work. Similarly, strategies like "I try to use various English expressions to express the same meaning in writing" ($M = 3.84$, $SD = 0.934$) and "I take notes in English writing classes" ($M = 3.80$, $SD = 0.948$) also scored high, indicating participants' focus on linguistic diversity and systematic note-taking. On the other hand, strategies such as "I search related documents when I have difficulties in English writing" ($M = 2.68$, $SD = 0.819$) and "I write an outline before writing English compositions" ($M = 2.73$, $SD = 0.758$) had lower mean scores, suggesting less frequent use. These findings highlight variability in SRL strategy adoption, with participants favoring specific strategies over others. These findings contradict with Jin's (2023) as well as Sun and Wang's (2020) findings, which also investigated Chinese university students and reported. In their studies, organization and transformation strategies and persistence strategies are the most frequent used ones.

4.2 Results of Research Question 2

Table 3. Chi-square test

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.605a	4	0.462
Likelihood Ratio	3.694	4	0.449
Linear-by-Linear Association	2.699	1	0.1

The chi-square test examined the relationship between gender and a specific SRL strategy, "I set a goal to improve my writing." The Pearson chi-square value was 3.605 with a degree of freedom of 4, resulting in a p-value of 0.462. Since the p-value is more significant than the significance threshold of 0.05, there is no statistically significant association between gender and the use of this SRL strategy. This finding suggests that male and female participants are equally likely to set goals for improving their writing, reflecting gender-neutral tendencies in goal-setting as part of SRL strategies.

Sun & Wang's (2020) investigated the gender differences in self-efficacy and self-regulation on writing performance. The study found that there are no differences in gender in writing self-efficacy strategies and writing self-regulated strategies as well. Similarly, Murtiningsih & Laili (2023) examined the aspect of SRL that English Language Education Department (ELED) students use the most frequently and to determine whether there is a statistically significant difference in the attitudes of male and female ELED students toward the usage of SRL tactics in academic writing. The results showed that attitudes concerning the use of SRL methods in academic writing are similar for both male and female students.

4.3 Results of Research Question 3

Answering research question 3 involved descriptive statistics and inferential statistics are included to address the research questions, with data presented in tables and figures for clarity.

4.3.1 Thematic analysis

Thematic analysis revealed that participants expressed a range of sentiments regarding rural-to-urban migration. Out of the 50 responses, 25 (50%) were classified as Positive, 24 (48%) as Mixed, and only 1 (2%) as Negative. Positive responses emphasized economic opportunities, access to education, and improved living standards in urban areas. Conversely, mixed responses balanced the benefits of urban migration with concerns about environmental degradation, overcrowding, and the decline of rural communities. Negative responses highlighted the detrimental effects on rural areas, such as cultural loss and the erosion of traditional agriculture.

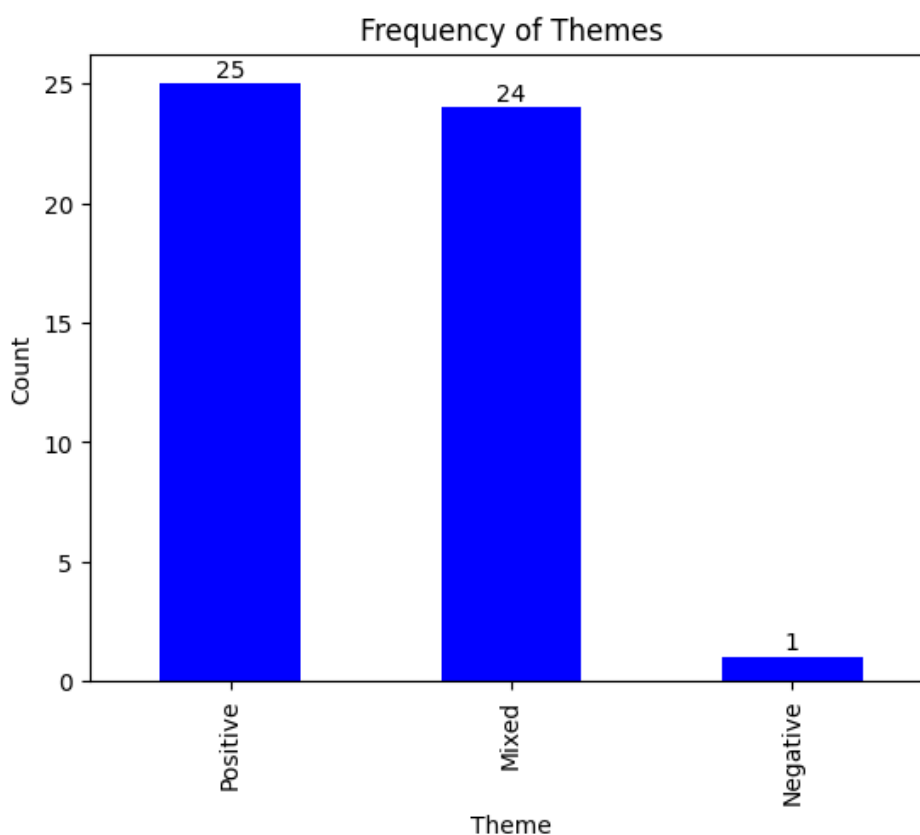
Table 4. Frequency of Themes in Responses

Theme	Frequency	Percentage (%)
Positive	25	50%
Mixed	24	48%
Negative	1	2%

Note. Themes were determined based on sentiment contradiction. Positive themes indicate a favorable view of urban migration, while mixed themes reflect both positive and negative perspectives.

Table 5 summarizes the frequency of themes, and Figure 1 provides a bar chart visualizing the distribution of sentiments. This distribution suggests that while urban migration is viewed positively overall, significant concerns persist, reflecting the complexity of the phenomenon.

Figure 1. Bar Chart of Theme Frequencies



Note. The chart shows the frequency of positive, mixed, and negative themes in the responses. Positive themes dominate, with nearly half of the responses expressing a nuanced view (mixed themes).

4.3.2 Self-Regulated learning strategies

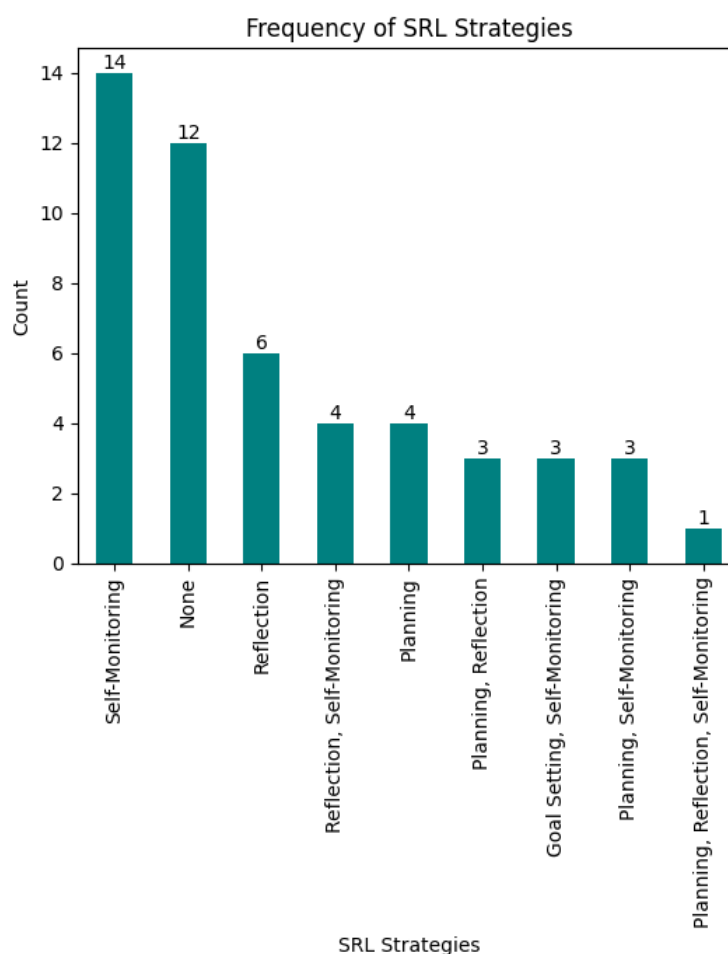
The analysis identified SRL strategies in 80% (n = 40) of the responses. The most common strategy was Self-Monitoring (60%), followed by Reflection (48%) and Planning (40%). Goal Setting was the least frequently employed strategy (20%). Participants using SRL strategies often provided structured arguments and demonstrated critical engagement with the topic.

Table 5. Frequency of Self-Regulated Learning Strategies

SRL Strategy	Frequency	Percentage (%)
Self-Monitoring	30	60%
Reflection	24	48%
Planning	20	40%
Goal Setting	10	20%

Table 6 displays the frequency of SRL strategies, and Figure 2 presents their distribution. This finding highlights the importance of self-regulated learning in fostering reflective and organized writing, even in non-academic contexts.

Figure 2. Bar Chart of SRL Strategy Usage



Note. This chart highlights the frequency of SRL strategies across responses. Self-Monitoring emerged as the most frequently employed strategy, suggesting its relevance in articulating complex arguments.

Figure 2 presents a bar chart depicting the frequency of SRL strategies utilized by participants. The x-axis represents different SRL strategies, while the y-axis represents the count of participants employing each strategy. The most frequently reported

strategy is Self-Monitoring (n = 14), followed by participants who reported using no SRL strategies ("None", n = 12). The "None" category refers to participants who did not explicitly engage in any SRL strategies during the task. Other SRL strategies include Reflection (n = 6), Reflection combined with Self-Monitoring (n = 4), and Planning (n = 4). Less commonly reported strategies include Planning combined with Reflection (n = 3), Goal Setting combined with Self-Monitoring (n = 3), and Planning combined with Self-Monitoring (n = 3). The least frequent strategy observed was Planning, Reflection, and Self-Monitoring combined (n = 1).

4.3.3 Writing Proficiency.

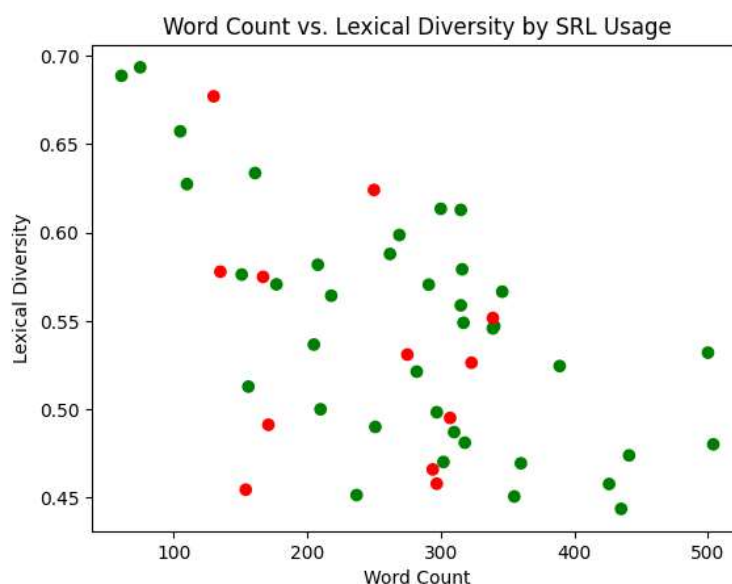
Table 6. Writing Proficiency Metrics

Metric	M	SD	Min	Max
Word Count	269.92	103.94	61	504
Average Sentence Length	27.37	35.96	12.58	269.00
Lexical Diversity	0.54	0.07	0.44	0.69

Participants' writing proficiency was assessed using word count, average sentence length, and lexical diversity. On average, responses contained M = 269.92 words (SD = 103.94), with an average sentence length of M = 27.37 words (SD = 35.96) and a lexical diversity of M = 0.54 (SD = 0.07).

Figure 3 illustrates the scatterplot between word count and lexical diversity, while Table 7 provides descriptive statistics for all writing metrics.

Figure 3. Scatterplot of Word Count and Lexical Diversity



Note. The scatterplot shows the relationship between word count and lexical diversity. The x-axis represents word count, while the y-axis represents lexical diversity. The data points are color-coded, with green and red markers indicating different categories of SRL usage. Participants with higher word counts tended to exhibit greater lexical diversity, reflecting more varied vocabulary use.

4.3.4 Statistical analysis

The chi-square test revealed a significant association between SRL strategy usage and thematic classification, $\chi^2(2, N = 50) = 9.45, p = 0.009$. This indicates that participants employing SRL strategies were more likely to express positive or mixed sentiments, while non-SRL users predominantly conveyed negative or simplistic views. This is indicated by the statistical analysis presented in Table 8, which shows that SRL usage is not randomly distributed across thematic categories but is significantly associated with them.

Additionally, the t-test results ($t = 3.72$, $p = 0.001$) demonstrate that participants using SRL strategies had significantly different word counts compared to non-SRL users. This supports the idea that SRL influences writing length and potentially depth. Furthermore, the Pearson correlation ($r = 0.58$, $p < 0.001$) indicates a moderate positive relationship between word count and lexical diversity, suggesting that longer responses tend to exhibit greater lexical diversity. These findings collectively emphasize the role of SRL in fostering more nuanced and reflective writing.

Table 7. Summary of Statistical and Inferential Analyses

Test	Metric	Statistic	p-value
T-Test	Word Count (SRL vs. non-SRL)	$t = 3.72$.001
Chi-Square	SRL Usage and Theme	$\chi^2 = 9.45$.009
Pearson Correlation	Word Count & Lexical Diversity	$r = .58$	< .001

Table 8 presents a summary of inferential statistics, including correlations among writing metrics. A significant positive correlation was found between word count and lexical diversity ($r = .58$, $p < .001$), indicating that longer responses tended to exhibit more varied vocabulary.

Such results were aligned with Turkben's (2021), who investigated the effect of education based on Self-Regulation Strategy Development Model on writing skills development. The subjects of the study were categorized into experimental group and control group. As a result of the study, it was found that experimental group students' written expression skills, writing self-regulation skills levels were significantly higher than the control group students'.

Moreover, Glaser & Burnstein (2007), Saddler et al. (2004), & Saddler (2006) have examined such a relationship, and it is seen that self-regulated learning strategies positively affect writing skills most importantly narrative ones. Other researchers have found the stronger impact on informative, persuasive, and argumentative writing skills (Berry & Mason, 2012; De La Paz, 1999).

4. Conclusion

The results of this study provide important evidence about the role of self-regulated learning writing strategies on students' writing proficiency. Particularly important is the evidence related to the role of self-regulated learning in fostering reflective and organized writing, even in non-academic contexts. Moreover, the study asserts that participants employing SRL strategies were more likely to express positive or mixed sentiments, while non-SRL users predominantly conveyed negative or simplistic views. Nonetheless, using SRL strategies had significantly different word counts compared to non-SRL users. These findings emphasized the role of SRL in fostering more nuanced and reflective writing.

Results revealed the participants' awareness of the importance of reviewing their work as well as the participants' focus on linguistic diversity and systematic notetaking. However, this was not the case for the other self-regulated writing strategies. Furthermore, results show that male and female participants are equally likely to set goals for improving their writing, reflecting gender-neutral tendencies in goal setting as part of SRL strategies.

This research nourishes new proof concerning the role of self-regulated learning writing strategies, in college environments. These results indicate that self-regulated learning writing is an essential contributor to student success in their writing proficiency. Thus, there is an obvious requirement for more studies in different contexts and backgrounds to determine the size of impact self-regulated learning writing strategies have on the learners' success.

Future studies should more carefully examine the role of self-regulated learning on students' other language skills such as speaking, reading, and listening. Subsequent research should include self-regulated learning (SRL) instructional intervention to analyze the exact impact of such strategies using direct instructional interventions. This type of research could provide a better understanding of which self-regulated learning strategies are most important.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

References

- [1] Al-Qahtani, A. (2016). Why do Saudi EFL readers exhibit poor reading abilities? *Journal of English Language and Literature Studies*, 6(1), 1-15.
- [2] Allwright, R. (1984). Why don't learners learn what teachers teach? The interaction hypothesis. In D. Singleton & D. Little (Eds.), *Language learning in formal and informal contexts* (pp. 3-18). Dublin: Irish Association for Applied Linguistics.
- [3] Alenezi, S. (2021). Investigating Saudi EFL students' knowledge and beliefs related to English reading comprehension. *Arab World English Journal*, 12(1), 339- 356.
- [4] Andrade, M. S. & Evans, N. W. (2013). *Principles and Practices for Response in Second Language Writing: Developing Self-Regulated Learners*. Routledge.
- [5] Ben-Eliyahu, A., & Bernacki, M. L. (2015). Addressing complexities in self-regulated learning: A focus on contextual factors, contingencies, and dynamic relations. *Metacognition and Learning*, 10(1), 1-13.
- [6] Boekaerts, M. (1999). Self-Regulated Learning: Where We Are Today. *International Journal of Educational Research*, 31, 445-457.
- [7] Boekaerts, M., Pintrich, P., & Zeidner, M. (2000). *Handbook of self-regulation* (Eds.). San Diego: Academic Press.
- [8] Brown, K. L. (2003). From teacher-centered to learner-centered curriculum: Improving learning in diverse classrooms, *Education* 124(1), 49-54.
- [9] Cheng, V. M. Y. (2011). Infusing Creativity into Eastern Classrooms: Evaluations from Student Perspectives. *Thinking Skills and Creativity*, 6, 67-87.
- [10] Cleary, T. J., & Zimmerman, B. J. (2004). Self-regulation empowerment program: A school-based program to enhance self-regulated and self-motivated cycles of student learning. *Psychology in the Schools*, 41, 537-550.
- [11] Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Pearson.
- [12] Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and Conducting Mixed-Methods Research* (2nd Edition). Sage Publications.
- [13] Crookes, G., & Lechner, A. (1998). Aspects of process in an ESL critical pedagogy teacher education course. *TESOL Quarterly*, 32(2), 319-328.
- [14] Crowhurst, M. (1990). Teaching and learning the writing of persuasive/argumentative discourse. *Canadian Journal of Education*, 15(4), 348-359.
- [15] De la Sablonnière, R., Taylor, D. M., & Sadykova, N. (2009). Challenges of applying a student-centered approach to learning in the context of education in Kyrgyzstan. *International Journal of Educational Development*, 29, 628-624.
- [16] Dignath, C., Buettner, G., & Langfeldt, H. (2008). How can primary school students learn SRL strategies most effectively? A meta-analysis on self-regulation training programmes. *Educational Resource Review*, 3, 101-129.
- [17] Duffy, G.G., & Roehler, L.F. (1982). Direct instruction of comprehension: What does it really mean? *Reading Horizons*, 23, 35-40.
- [18] Glaser, C., & Brunstein, J. C. (2007). Improving fourth-grade students' composition skills: Effects of strategy instruction and self-regulation procedures. *Journal of Educational Psychology*, 99(2), 297-310.
- [19] Graham, S., & Harris, K. R. (2000). The role of self-regulation and transcription skills in writing and writing development. *Educational Psychologist*, 35, 3-12.
- [20] Greene, J. A., & Azevedo, R. (2009). A macro-level analysis of SRL processes and their relations to the acquisition of a sophisticated mental model of a complex system. *Contemporary Educational Psychology*, 34(1), 18-29.
- [21] Hadwin, A. F. (2008). Self-regulated learning. In T. L. Good (Ed.), *21st Century Education: A Reference Handbook* (pp. 175-183). Sage Publications.
- [22] Hadwin, A.F., Järvelä, S., & Miller, M. (2011). Self-regulated, co-regulated, and socially- shared regulation of learning. In B.J. Zimmerman & D.H. Schunk (Eds.), *SRL and academic achievement: Theoretical perspectives* (pp. 289-307). New York: Lawrence Erlbaum Associates.
- [23] Harmer, J. (2004). *How to teach writing*. Harlow, UK: Longman.
- [24] Harris, K. R., Graham, S., MacArthur, C. A., Reid, R., & Mason, L. (2011). SRL processes and children's writing. In B. Zimmerman & D. H. Schunk (Eds.), *Handbook of self-regulation of learning and performance* (pp. 187-202). New York, NY: Routledge.
- [25] Hayes, J. R. (2000). A new framework for understanding cognition and affect in writing. In R. Indrisano, & J. R. Squire (Eds.), *Perspectives on Writing: Research, Theory, and Practice* (pp. 6-44). International Reading Association.
- [26] Jin, H. (2023). Chinese College Students' English Writing Self-efficacy and Writing Self-regulated Strategies. *Frontiers in Educational Research*, 6, 20. 129-137.
- [27] Kizilcec. R. F., Pérez-Sanagustín. M., & Maldonado. J. J. (2017). Self-regulated learning strategies predict learner behavior and goal attainment in Massive Open Online Courses. *Computers & Education*, 104, 18-33.
- [28] Loughheed, L. (2008). *Barron's students' #1 choice: IELTS International English Language Testing System*. New York, NY: Barron's Educational, Series, Inc.
- [29] McCombs, B. L., & Whisler, J. S. (1997). *The learner-centered classroom and school: Strategies for increasing student motivation and achievement*. San Francisco, CA: Jossey-Bass.
- [30] McDonald, J. P. (2002). Teachers studying student work: Why and how? *Phi Delta Kappan*, 84(2), 121-127.
- [31] Murtiningsih, S. R., & Laili, R. I. N. (2023). Self-Regulated Learning Strategies on Academic Writing: Differences Between Genders, *E3S Web Conf*.
- [32] Oxford, R. L. (2011). *Teaching and researching language learning strategies*. Pearson Education.
- [33] Pascoe, S., Hutton, T., & Hoshino, E. (2018). Offsetting externalities in estimating MEY in multispecies fisheries. *Ecological Economics*, 146, 304-311.
- [34] Perry, N. E., VandeKamp, K. O., Mercer, L. K., & Nordby, C. J. (2002). Investigating teacher student interactions that foster SRL. *Educational Psychologist*, 37, 5-15.
- [35] Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 451-502). Academic Press.
- [36] Pintrich, P. R. (1999). The role of motivation in promoting and sustaining self-regulated learning, *International Journal of Educational Research*, 31(6), 459-470.

- [37] Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82(1), 33–40.
- [38] Saddler, B. (2006). Increasing Story-Writing Ability through Self-Regulated Strategy Development: Effects on Young Writers with Learning Disabilities. *Learning Disability Quarterly*, 29(4), 291-305.
- [39] Saddler, Bruce & Moran, Susan & Graham, Steve & Harris, Karen. (2004). Preventing Writing Difficulties: The Effects of Planning Strategy Instruction on the Writing Performance of Struggling Writers. *Exceptionality*, 12, 3-17.
- [40] Savignon, S. (1991). Communicative language teaching: State of the art. *TESOL Quarterly*, 25, 261-277.
- [41] Schleppegrell, M. J. (2004). The language of schooling: A functional linguistics perspective. Lawrence Erlbaum Associates Publishers.
- [42] Schmitz, B., & Wiese, B. S. (2006). New perspectives for the evaluation of training sessions in SRL: Time-series analyses of diary data. *Contemporary Educational Psychology*, 31, 64-96.
- [43] Schunk, D. (1984). Sequential attributional feedback and children's achievement behavior. *Journal of Educational Psychology*, 76, 1159-1169.
- [44] Schmitz, B., & Wiese, B. S. (2006). New perspectives for the evaluation of training sessions in SRL: Time-series analyses of diary data. *Contemporary Educational Psychology*, 31, 64-96.
- [45] Shanker, S. (2010). Self-regulation: Calm, alert, and learning. *Education Canada*, 50, 4-7.
- [46] Sun, T., & Wang, C. (2020). College Students' Writing Self-Efficacy and Writing Self-Regulated Learning Strategies in Learning English as a Foreign Language. *System*, 90.
- [47] Taylor, B. P. (1983). Teaching ESL: Incorporating a communicative, student-centered component. *TESOL Quarterly*, 17, 69-88.
- [48] Türkben, T. (2021). The Relationship Between Fifth Grade Student's Writing Anxiety And Blocking With Their Written Expression Skills. *International Online Journal of Education and Teaching (IOJET)*, 8(2). 998-1021.
- [49] Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology*, 81, 329-339.
- [50] Zimmerman, J.L. (1983) Taxes and Firm Size. *Journal of Accounting and Economics*, 5, 119-149.
- [51] Zimmerman, B. J. (2013). From Cognitive Modeling to Self-Regulation: A Social Cognitive Career Path. *Educational Psychologist*, 48, 135-147.
- [52] Zimmerman, B. J. (2001). Theories of SRL and academic achievement: An overview and analysis. In B. J. Zimmerman & D. H. Schunk (Eds.), *SRL and academic achievement: Theoretical perspectives* (pp. 1-37). New York: Lawrence Erlbaum Associates.
- [53] Zimmerman, B., & Martinez-Pons, M. (1988). Construct validation of a strategy model of student SRL. *Journal of Educational Psychology*, 80, 284-290.
- [54] Zimmerman, B. J., & Risemberg, R. (1997). Self-regulatory dimensions of academic learning and motivation. In G. D. Phye (Ed), *Handbook of academic learning: Construction of knowledge* (pp. 105–125). San Diego, CA: Academic Press.
- [55] Zimmerman, B. J., & Schunk, D. (2011). SRL and performance: An introduction and an overview. In B. Zimmerman & D. H. Schunk (Eds.), *Handbook of Self-Regulation of Learning and Performance* (pp. 187-202). Routledge.

Appendix A

Questionnaire of English Writing Self-Regulated Learning Strategies (QEWSRLS): Please use the following scales to answer these questions accordingly. Please choose the number accurately representing your capabilities. (I never use it, I seldom use it, I sometimes use it, I often use it).

1. Check my English composition before turning them in.
2. Write an outline before writing English compositions.
3. Consult teachers when I encounter difficulties in my English writing.
4. Keep writing when I encounter difficulties in English writing.
5. Use sentence patterns just learned to make new sentences for practice in writing.
6. Write down the mistakes I often make in the process of writing.
7. Reward myself when I make a progress in writing.
8. Set a goal to improve my writing.
9. Review English texts I have learned before writing.
10. Proofread my English composition after I complete writing.
11. Think out a composition in Arabic before writing it in English.
12. Ask classmates when I have questions in my English writing.
13. When a friend wants to play with me, but I have not finished my writing yet, I do not play until I finish my writing.
14. Send emails to friends in English on my initiative.
15. Take notes in English writing classes.
16. Have a break when I am tired during writing.
17. Make a plan in the process of English writing.
18. Review my notes of English class before writing.
19. When I finish my English composition, I have a rest and then read it again to check whether it should be revised.
20. Make sure to write a topic sentence in each paragraph in writing.
21. Search related documents when I have difficulties in English writing.
22. Find a quiet place to write when the environment is disturbing.
23. Try to use various English expressions to express the same meaning in writing.
24. Make sure that the content of each paragraph supports its topic sentence in English writing.
25. Use words just learned to make new sentences on my initiative in writing.
26. Pay attention to the English language structure during writing.

Appendix B**Sample of IELTS Writing Task 2**

You should spend about 40 minutes on this task.

Write about the following topic:

In many countries around the world, rural people are moving to cities, so the population in the countryside is decreasing.

Do you think this is a positive or a negative development?

Give reasons for your answer and include any relevant examples from your own knowledge or experience.

Write at least 250 words.