Effects of Self-Regulatory Strategy Development on EFL Learners' Descriptive Writing and Reflective Thinking

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Abstract

Writing is a demanding, complicated, and fundamental skill which is highly noticeable in the process of learning a foreign language. Thus, it is so important to teach English as a foreign language (EFL) learners how to write effectively in English through effective strategies and instructions and prompt their reflective thinking during EFL learning. This study investigated the effectiveness of using self-regulated strategy development (SRSD) instruction in improving Iranian EFL learners' descriptive writing and reflective thinking skills and compared the effectiveness of such instruction with nonstrategic-based (i.e., traditional) instruction. To these ends, 30 Iranian advanced EFL learners were selected to participate in the two (experimental and control) groups. To collect data, two descriptive essays and a reflective thinking questionnaire were used as the pretest and posttest. The analysis of covariance on the descriptive essay and reflective thinking scores in the control and experimental groups showed that both SRSD and non-SRSD instructions had a positive impact on the EFL participants' descriptive writing skill but, the participants in the SRSD group achieved better outcomes in their descriptive writing; the SRSD instruction was effective in improving the completeness, length, and overall quality of the EFL learners' descriptive writing performance. Also, SRSD instruction improved the learners' reflective thinking more than the non-SRSD instruction by making them metacognitively aware of their cognitive processes and monitoring, analyzing, and evaluating their descriptive writing performance. The findings draw attention to the importance of using SRSD as a possible way for moving EFL learners away from traditional instructions to process-oriented strategies in writing courses.
Keywords: Writing, Descriptive writing, SRSD, Reflective thinking

1. Introduction

Writing has had an essential role in human life. We need to learn to write in order to share thoughts, feelings, and our ideas. As Cosmose (1980) states, writing is perhaps the greatest of human inventions, binding together people, citizens of distant epochs, who never knew each other. It plays a pivotal role in today's contacts among the members of various discourse communities all around the world (Dehghan & Chalak, 2016). Books break the shackles of time and inspire us to make our own contributions to the collective knowledge of the human species. In the field of second/foreign language (L2) teaching and learning, writing is considered as an important part of successful learning. In fact, writing can support L2 learners clarify their own thoughts and improve the quality and quantity of their own learning. However, learning to write is considered as a complex skill for EFL learners, because various cognitive, metacognitive, and linguistic processes are involved and learners face difficulty in planning their writing process, organizing, drafting, and revising their writing (Mertens, 2010).

According to Mason, Harris, and Graham (2011) many EFL students struggle with the writing process as a complicated task because it requires the simultaneous combination of several strategies and the application of various mental resources. To be successful, these writers need an understanding of the components of a text as well as knowledge of writing strategies which can be used to shape and organize the writing process. English as a foreign language (EFL) students with writing difficulties spend little time in critical writing processes and tend to focus on low-level transcription skills such as handwriting, spelling, capitalization, and punctuation. Generally speaking, dissatisfaction with these kinds of problems in L2 learning context lead the teachers focus on the emergence of new strategy models in order to facilitate the learning of target language writing. Self-regulation strategy development (SRSD), as one of the writing strategy-based models or intervention programs, is designed to teach strategies for completing writing academic tasks to L2 learners (Harris & Graham, 2006). SRSD was developed by Harris and Graham in the early 1980s. As Wong and Bulter (2012) state, SRSD was initially designed to address the self-regulation difficulties of students with learning difficulties through incorporation of self-regulation strategies. Moreover, according to Little (2007) and Oxford, (2011), SRSD instruction consists of explicit, interactive, and nonlinear instructional stages working together. On a closer look, SRSD helps simplify and organize the myriad of complex tasks required throughout the

writing process: define a course of action for successfully completing all or part of a writing assignment, make the mental operations that occur during planning, composing, evaluating, and revising visible and concrete, and enhance students' knowledge about the writing genres and the process (Graham & Harris, 2005). Another important variable in L2 learning is reflective thinking, which is deeper than just thinking about something. It refers to almost any purposeful thought where the learners engage in active, persistent, and careful consideration of ideas for deeper understanding (Wilson & Murdoch, 2006). Basically, one of the most basic objectives of education is to train individuals to thinking about their thinking (Moon, 1999, cited in Kim, 2005). As in our changing society users need to change problem solving strategies and apply new knowledge to the novel situations; it is important to prompt reflective thinking during learning. As Rudd (2007) states, an important role of reflective thinking is to prompt the thinker during problem solving situations, because it provides an opportunity to step back and think of the best strategies to achieve goals. In addition, as Boud, Keogh, and Walker (1985) state, reflective thinking in any field of language learning and teaching is essential. Teacher and learners need to have a reflection on their routine regularly. Reflection is comprised of cognitive and affective activities that individuals employ to examine experiences to create new understanding.

As Khomeijani Farahani and Faryabi (2017) state, due to the unquestioned significance of writing and its ubiquitous presence in academic settings and beyond, it is crucial to explore this skill. Moreover, in order to handle the difficulties that L2 students have in effective writing and reflective thinking and remove some obstacles to manage their thoughts and skills needed for writing, we may need to implement new teaching methods. The present study was intended to use SRSD instructional approach to improve EFL learners' reflective thinking and descriptive writing skills. Descriptive writing as one of the most problematic genre of writing requires special teaching methods. Writing an effective descriptive essay partly depends on understanding of how to clearly share clear details and information over a particular topic as well as making clear images for readers. Moreover, descriptive writing is more connected to heavy cognitive and metacognitive demands in planning text and revising skill. Thus, this study sought to see whether strategy-based instruction was an effective classroom-based practice in improving descriptive writing skill and whether SRSD could increase EFL learners' reflective thinking.

2. Literature Review

2.1. Self-Regulation Strategy Development (SRSD)

Early research on self-regulation mostly had a therapeutic function and aimed to treat aggressive behaviors of learners. However, self-regulation has recently gained a prominent role in both education and language teaching/learning (Khomeijani Farahani & Faryabi, 2017). In the like manner, SRSD was initially developed by Graham and Harris in 1982 as an approach to instruction for those students who would often face difficulties with writing tasks that impacted their affective, behavioral, and cognitive characteristic (Flander, 2014). SRSD is now designed to help students master the higher level cognitive processes involved in composing, develop autonomous, reflective, self-regulated use of effective writing strategies, increase knowledge about the characteristics of good writing, and form positive attitudes about writing and their capabilities as writers (Harris & Graham, 2005).

Six constructional stages provide the framework for SRSD. These stages represent a "metascript" providing a general guideline that can be reordered, combined, or modified to meet student and teacher needs (Graham & Harris, 2005):

- Develop Background Knowledge. The first stage of instruction involves helping students develop the pre skills including knowledge of criteria for good writing, needed to understand, acquire, and execute the writing strategy and accompanying self-regulation procedures.

- Discuss It. During the second stage, teacher and students examine and discuss current writing performance and strategies used to accomplish specific assignments. The writing strategy targeted for instruction is then introduced, and its purpose and benefits as well as how and when to use it are examined.

- Model It. In this stage, the teacher models how to use writing strategy using appropriate self-instructions including problem definition, planning, strategy use, self-evaluation, coping and error correction, and self-reinforcement statements.

- Memorizing the Strategies. During stage four, the steps of writing strategy, any mnemonic for remembering it, and personalized self-statement are memorized.

- Support It. In stage five, students and teachers use the strategy and self-instructions collaborative to complete specific writing assignments.

- Independent Performance. During the final stage, students are the strategy indecently. If students are still using self-regulatory procedures such as goal setting or self-

assessments, they may decide to start finding them out. Students are also encouraged to say their self-assessments covertly in their heads.

A number of researchers have sought to identify the types of self-regulatory processes that students use while engage in academic tasks. Many of these studies also have determined whether the use of processes would vary as the function of individual difference is variable. For instance, NabaviEkhlas and Shangaraffam (2012) went into the relationship between determinant factors of self-regulation strategies and main language skills and overall proficiency based on the social cognitive theory of Bandura (1986) and Zimmerman (1986). In order to find the relationship between these self-regulation strategies with overall proficiency and language skills, 150 Iranian candidate of IELTS took part in their research. The findings showed that Iranian EFL learners could benefit from using behavioral self-regulation strategies and self-regulation strategy use correlated with language skills.

Moreover, Graham, Harris, and Adkin (2015), investigated the implementation of SRSD in story writing by 11 second grade teachers who first collaborated in practice-based professional development in SRSD. Students at-risk for failure in writing were randomly assigned to treatment and control conditions in each teacher's classroom. Teachers implemented SRSD with small groups of students at-risk of failure in writing (referred to as Tier 2 intervention in the Response to Intervention, or RTI, model) in their classrooms; the control students at-risk in writing received regular classroom instruction from their teachers. Integrity of strategies instruction and social validity were assessed among the participating teachers. Student outcomes which were assessed included the inclusion of genre elements and story quality, generalization to personal narrative, and teacher perceptions of intrinsic motivation and effort for writing. Significant effects were found for inclusion of genre elements and story quality at both posttest and maintenance. The intervention also resulted in significant generalization to personal narrative.

In another study, Bakry and Alsamadani (2014) attempted to investigate the impact of SRDS on writing persuasive essays among students who studied Arabic as a foreign language. Twenty-four learners of Arabic in the institute of the Arabic language for nonnative speakers at Umm Al-Qura University were selected as the sample. The sample was divided into two groups: the experimental group received 9 training sessions using SRDS, and the control group practiced writing traditionally, which is common in teacher-fronted classrooms. The results of the study indicated that SRDS was effective in writing persuasive essays for the

students of Arabic, in general. Also, the most predictable skills to be improved were: paragraph writing, creating ideas, organization, clarity of position, and sentence structure and vocabulary.

2.2. Reflective Thinking

Reflection is comprised of cognitive and affective activities that individuals employ to examine experiences to create new understanding (Boud, Keogh& Walker, 1985). Reflective thinking has been explored by many scholars of diverse traditions and perspectives in education, such as Dewey (1933), experiential learning theorists (Kolb, 1984), researchers of professional education and development (e.g., Schön, 1983), and educational psychologists studying metacognition and self-regulated learning (Zimmerman, 2002). These diverse approaches to the study of reflective thinking have led to various definitions and the interchangeable use of the terms such as reflective thinking, reflection, self-reflection, metacognitive reflection, or critical reflection in the literature (Moon, 1999; Rogers, 2002).

Dewey (1933), who introduced the idea of reflective thinking in education, views it as a specialized form of thinking that arises from a state of doubt, uncertainty, or difficulty that the learner has experienced in their learning. According to Dewey, reflective thinking is a process of solving the "perplexity" triggered by a learning experience.Dewey described the process of reflective thinking as having five phases: (a) suggestions in which the mind leaps forward to a possible solution, (b) an intellectualization of the difficulty or perplexity that has been felt (directly experienced) into a problem to be solved, a question for which the answer must be sought, (c) the use of one suggestion after another as a leading idea, or hypothesis, to initiate and guide observation and other operations in the collection of factual materials, (d) the mental elaboration of the idea or supposition (reasoning, in the sense in which reasoning is a part of inference), and (e) testing the hypothesis by overt or imaginative action. In this light, the process of reflective thinking is a process of transforming a perplexing situation into a settled one by suggesting a tentative resolution to the initial problem (p. 170).

Other accounts of reflection or self-reflection have been discussed extensively within the study of educational psychology, especially within the study of metacognition and self-regulated learning. From the perspectives of metacognition, reflective thinking is believed to be associated with the component of regulation of cognition (e.g., Davidson & Sternberg, 2003). In this light, Zimmerman (2002) proposes a model of self-regulated learning consisting

of three cyclical phases: forethought, performance, and self-reflection. According to Zimmerman (2002), self-reflection involves self-judgment (i.e., comparison of self-observed performance, beliefs about the cause of one's errors or successes) and self-reaction (i.e., feelings of self-satisfaction). Self-reflection, therefore, can be seen as a continuous process that learners evaluate their motivational, cognitive, and metacognitive activities engaged in performing a learning task and learning outcome.

Furthermore, Schon (1983, as cited in Burns & Richard, 2012) states that reflection takes place in two ways. In the first way, which is called reflection in action, reflection happens before or after the action. In the second way, which is called reflection on action, refelction emerges in the course of action. In sum, reflecting on practice has become an element of professional competence required to bridge the theoretical and practical gap in any profession (Mann, 2007).

There are several studies which investigated reflective thinking in L2 contexts. Naghdipour and Emeagwali (2013) attempted to assess and compared the level of reflective thinking in undergraduate university students and to investigate lectures' perception on the promoter or inhibitors to their students' reflective thinking. A sample of 96 students, who were taking practical courses such as 'Special Teaching Methods', Teaching Language Skills', and Teaching Practice', as well as 10 instructors from Easter Mediterranean University took part in their study. The results revealed that the age and level of education were two key determinants of reflective thinking behavior.

Besides, Phan (2009) designed a study to examine processing strategies, effort, reflective thinking practice, and achievement goals as important factors contributing to the prediction of students' academic success. Phan used causal modeling procedures to explore the direct and mediating effects of these theoretical orientations on students' academic achievement and learning. 347 second and third-year undergraduates completed a number of inventories (e.g., the Reflective Thinking Questionnaire). Results showed that performance-approach goals exerted a negative effect on academic achievement. Both mastery and performance-approach goals also directed affected reflection, whereas deep processing strategies were directly affected by mastery goals and effort. Importantly, both reflection and effort were found to act as potent mediators.

The review of literature shows there are a few studies that have investigated the role of strategies on the writing abilities of L2 learners. More specifically, the literature does not

report any empirical studies that show the effectiveness of SRSD on the descriptive writing and reflective thinking skills of L2 learners in an EFL context. This study, therefore, sought to fill the gap in the literature on strategic learning. If the EFL learners make gains in descriptive writing and reflective thinking skill through SRSD, this strategic instructional model can be recommended at other contexts. In this light, the present study has addressed the following questions:

1. Does SRSD instruction have any effect on the EFL learner's descriptive writing skill?
2. Does SRSD instruction have any effect on the EFL learners' reflective thinking?

3. Method

3.1. Participants

The participants in this study were 30 Iranian EFL learners who enrolled in an advanced English course at the Iran Language Institute (ILI), Shahrekord Branch. All of the participants were female and their age range was from 21 to 30. Since complete random sampling was not possible in this study, two intact classes were selected and were randomly assigned as control and experimental groups, with each group having 15 EFL participants. They studied English as a foreign language for several years, and they were able to write English paragraphs; they attended the advanced English writing course which focused on providing practice in writing skills.

3.2. Instrument

This study made use of three instruments for data collection: Oxford Placement Test (OPT, 2004)**,** two descriptive essays, and a reflective thinking questionnaire.

3.2.1. Oxford Placement Test

The first instrument employed in the study was Oxford Placement Test (OPT). OPT measuring listening as well as grammar, vocabulary and writing skills. Allen (2004), the developer of the test, claims that the OPT is capable of being utilized with any number of students of English to ensure efficient, reliable, and accurate grading and placing of students into classes at all levels from elementary to advanced. According to Allen, the OPT has been calibrated against the proficiency levels based on the Common European Framework of Reference for Languages (CEFR), the Cambridge ESOL Examinations, and other major

international examinations. Meanwhile, the reliability of the test as measured by Cronbach's alpha in the current study was found to be 0.85.

3.2.2. Descriptive Essays

Descriptive essays were administered to both groups as the pretest, and posttest. Two topics, not requiring any special knowledge, were given to the participants. For one of them, the participants were asked to write a four-paragraph 50-mintue descriptive essay on the topic '*Give an account of a normal day in your life*' and for the other one, they were asked to write on the topic '*Give a description of the typical school day*'. The number of words in each essay was more than 300 words (about 350-400 words). The essays were used as the pretest and posttest of the study. Care was taken to make the titles of the essays as similar as possible in terms of complexity of language, readability and frequency of words. . In order to assess the quality of writing performance of the participants in the pretest and posttest, an analytic scoring rubric, developed by Lado (2008), was used. It included 5 components/categories: focus (15 points), elaboration and support (15 points), organization (15 points), conventions (15 points), and vocabulary (15 points). Each of these components was divided into subcategories and numerical value and explanations were provided for them. Meanwhile, two raters were invited to rate the essays in the pretest and posttest phases to establish inter-reliability of the scoring.

3.2.3. Reflective Thinking Questionnaire

The Reflective Thinking Questionnaire (RTQ) was devloped, piloted and validated by Kember, Leung, Jones, and Loke (2000). who measured the perceived ability for reflective thinking of each individual in their sample. The findings of the pilot study indicated that the questionnaire operated as expected in terms of internal consistency and reliability, particularly so far as the reflection and critical reflection scales were concerned. Also, according to Haghparast (2015), this questionnaire serves as a valid referencing to the findings from other survey questionnaires in reflective thinking. Items in the RTQ measured the extent to which learners were engaged in the four types of reflective thinking: habitual action, understanding, reflection, and critical reflection. Each level of the RTQ is progressive and cumulative, building each subsequent question on knowledge, and reflective thinking practice. The instrument contained 16 items (see Appendix A), with scoring responses on a five-point

Likert scale (1 – *definitely disagree*; 2 – *disagree*; 3 – *unsure*; 4 – *agree*; 5 - *definitely agree*). This study used Cronbach's Alpha coefficent as an indicator of internal consistency. The result indicated that the Cronbach's Alpha for the questionnaire was .88, which was accepted for the purpose of this study.

3.3. Data Collection and Analysis Procedures

The data were collected in several steps. First, the OPT (2004) was administered to a sample of EFL learners to select a homogenous sample (n = 30). They all enrolled in an advanced English course in the summer semester of 2015. Those who enrolled on even day were considered as the control group (n = 15) and those participants with the same conditions who enrolled in odd days, were considered as the experimental group (n = 15). Before the instruction, all the participants were asked to write a four-paragraph descriptive essay (*Give an account of a normal day in your life*) and complete RTQ as the pretest.

The experimental group received SRSD instruction in seven sessions in three weeks. The SRSD model comprised of planning, editing, and revising processes which were supported by the use of self-regulation strategies. The participants in the experimental group were taught to use POW to write descriptive essays. In fact, the general planning strategy included three steps, represented by the mnemonic POW: *Pick my ideas*, *Organize my notes*, and *Write and say more*. As a means of helping the participants carry out the POW, they were also taught a genre-specific strategy, called PLEASE strategy, which prompted them to generate ideas for the basic parts of a descriptive writing (see Appendix B). The first step of the PLEASE strategy, P, stands for the action Pick. At this step students learn to pick their topic, Pick their audience and, Pick the type of the paragraph. The second letter, L, refers to List. Students are taught various techniques for idea generation about the topic before starting to write. The third step of the strategy, E, represents Evaluate for ongoing evaluation of the process. At this stage, students are taught to check if their list is complete and how they can organize their notes. The fourth step, A, reminds students Activate their paragraph with a topic sentence. Students are taught how to write a precise and effective introductory sentence. The fifth step, S, cues students to Supply supporting ideas for their paragraphs based on the list that they have generated for the second step. The final letter, E, reminds students to End with a concluding sentence and Evaluate their work.

According to Graham and Harris (2005), SRSD approach follows six stages. During the second stage of instruction, *Discuss It*, POW and PLEASE strategy was discussed by the teacher and learners. The learners were first examined to determine whether they remembered what POW and PLEASE stood for; Each step, the benefits, and when and where to use the strategies were discussed. During the third stage of instruction, *Model It*, the instructor showed the EFL students how to apply POW and the descriptive essay part reminder and the learners observed instructor who modeled how to brainstorm ideas.

In the fourth stage of instruction, *Memorize It*, the instructor explained to the students that it was easier to use the strategy if they memorized the steps and the mnemonic. The learners memorized the steps in SRSD using mnemonic (i.e, POW+PLEASE). In stage five, *Support it*, the learners used POW and PLEASE strategy and self-instruction to complete the descriptive writing essay. The teacher acted as a facilitator and supported the students in using the strategy. The students began to write using what they have learned, along with the teacher's support. In stage six, Independent Performance, the students moved to use POW and the descriptive essay reminder to write a descriptive essay without relying on the teacher's help. During the final stage, the students used the strategy independently. They were taught to use their self-instruction in their head, instead of vocalizing it.

On the other hand, the control group just received conventional writing instruction which did not focus on process-oriented strategies. The control group received instruction about mechanical writing (e.g., organization, spelling, grammar, handwriting, and features of descriptive essays). After the instruction, all the learners in the control group practiced writing a descriptive essay, which were corrected by the teacher; that is to say, the syllabus for the control group was product-oriented.

After receiving the instructions, both experimental and control groups took part in the posttests by having another descriptive essay (e.g., *Give a description of the typical school day*) as well as completing RTQ.

To increase the dependability of the data, both pretest and the posttest essays were graded by two raters and interrater reliability was computed. The interrater reliability indices for the pretest and posttest were found to be 0.97 and 0.98, respectively. Finally, the pretest and posttest scores were compared to address the research questions of the study. Given pretest-posttest design of study, analysis of covariance (ANCOVA) was used as a statistical tool for data analysis. According to Larsen-Hall (2010, p. 357), "such a technique may be

useful when you assume that there is some external factor, such as pretest … which will affect how your students will perform on the response variable". ANCOVA (a replacement for a series of *t*-test and extension of analysis of variance) can "reduce the amount of variability in the model that is unexplained" (p. 357).

4. Results

To compare the performance of SRSD (experimental) and non-SRSD (control) groups, the writing scores in both groups were obtained. Table 1 shows the descriptive statistics of writing scores in both groups.

Table 1.

Descriptive Statistics of writing Scores in Both Groups

Group	Variable	*N*	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis
							Statistics	
Non-SDSR	Pretest	15	60	71	66.28	8.46	-.28	1.26
	Posttest	15	70	75	68.66	6.16	.09	.008
SDSR	Pre-test	15	59	84	65.93	8.55	-.21	.29
	Post-test	15	62	89	77.06	8.55	-.04	-.55

According to Table 1, the pretest mean scores in the non-SRSD and SRSD groups were 65.93 and 66.23; that is, the mean score in the non-SRSD was little larger than SRSD group. However, the difference was not great. According to Table 1, the difference in the posttest mean scores of the SRSD (77.06) and non-SRSD (68.66) groups was more, with the SRSD group receiving higher writing gains. Also, the data in Table 1 show that the mean scores increased from the pretests to the posttests in both groups, indicating the better performance of the two groups after the instructions.

To find out the answer to the first research question of study, concerning the comparative effects of SRSD and non-SRSD instructions on the participants' writing performance, Analysis of covariance (ANCOVA) was conducted after checking the homogeneity of the groups in terms of writing scores in both groups, equality of variance across both groups, the reliability of the covariate i.e., the pretest writing scores, and non-significant interaction effect between the covariate and the treatment. The results of the ANCOVA are summarized in Table 2.

Table 2.

Analysis of Covariance for the Treatment Effect on Posttest Score

Source	Type III Sumof Squares	Df	Mean Square	F	Sig	Partial Eta Square
Corrected Model	4012,07	2	2006,04	54.33	.000	. 627
Intercept	2015,65	1	2015,63	57,15	.000	.469
Pre-test	1677,77	1	1677,77	50,27	.000	.429
Group * Treatment	1616,69	1	1616,69	46,25	.000	.419
Error	2184,20	27	35.59			
Total	109600.54	30				
Corrected Total	5390,32	29				

As Table 2 revealed, the model was significant and the SRSD group performed better than the traditional group in the posttests, so the SRSD group significantly performed better than the other group. The above statistics point to the conclusion that the SRSD group significantly performed better than the non-SRSD group on the descriptive writing after the treatment. In other words, the SRSD instruction had a more significant impact on L2 descriptive writing on the Iranian EFL learners.

Furthermore, RTQ was employed to measure reflective thinking of the participants in the two SRSD and non-SRSD groups. Descriptive statistics of the reflective thinking measure are summarized in Tables 3.

Table 3.
Descriptive Statistics of Reflective Thinking Scores in Both Groups

Group	Variable	N	Min	Max	Mean	Std. Deviation
SRDS	Pretest	15	35	62	51.66	7.89816
	Posttest	15	34	66	59.00	2.99
Non-SDSR	Pretest	15	36	84	50.00	4.23
	Posttest	15	36	63	52.00	7.118

As Table 3 shows, the reflective thinking scores ranged from 35 to 59. The minimum and maximum reflective thinking scores belonged to the pretest and posttest scores in the non-SRSD and SRSD. Based on Table 3, the pretest mean scores in the non-SRSD and SRSD groups were 50 and51. This mean score (the pretest mean score) in the non-SRSD was smaller. The posttest mean scores in the non-SRSD and SRSD were 52 and 59. That is, the difference was larger. The SRSD group received a higher mean score in the posttest (59).

To find out the answer to the second research question of study, intended to examine the effect of the SRSD instruction on the EFL learners' reflective thinking , another ANCOVA was conducted.

As displayed in Table 4, the results showed the model was significant, F (2, 27) = 34.98, $p < .05$. Also, the treatment of the study in the SRSD group had a positive effect on the participants' posttest reflective thinking scores. Compared with the instruction in non-SRSD group, the instruction in the SRSD group was more effective, F (1, 27) = 5.85, $p < .05$. The above results showed that the SRSD group ($M = 66.25$) performed better than traditional group ($M = 60.04$) in the posttest. That is to say, the SRSD group significantly performed better than the other group.

Table 4.
Analysis for Treatment Effect on Posttest Reflective Thinking

Source	Sum of Squares	*Df*	Mean Square	*F*	*Sig*	Partial Eta Square
Corrected Model	8595.050[a]	2	4079.525	34.986	.000	.0563
Intercept	3627.897	1	3627.466	31.036	.000	.0367
Pre-test	7038.664	1	7038.664	60.181	.000	.0522
Group	607.006	1	607.006	5.853	.024	.086
Error	6467.850	27	107.331			
Total	247036.899	30				
Corrected Total	13721.360	29				

5. Discussion

The results of the statistical analysis indicated the writing mean scores improved from the pretest to the posttests in both groups of the study, so the instructions in both groups had an impact on the participants' descriptive writing skill. Also, the results obtained in the current study revealed that the EFL learners in the SRSD group, as compared with the non-SRSD group (traditional one), had greater performance in descriptive writing tasks. Explicit and strategic instruction (POW+PLEASE) given by the instructor in writing provided indispensable support to address the EFL learners' need and improved their performance on the descriptive writing. EFL learners who followed the SRSD instruction had better performance in the generation of ideas, establishing aims, organizing the text, transforming

the ideas into written language, and evaluation and correction. The instructions provided the opportunity for the EFL students to take responsibility of their own writing and move from mechanical learning to independent practice so that they would be able to learn how to write descriptive essays effectively and independently. The results of the past research (e.g., Amini & Roohani, 2014), in which the SRSD intervention significantly improved EFL students' argumentative writing process and provided opportunties to learn writing strategies, is in line with the results of the present study.

In the SRSD group, the general writing processes (planning, editing, and revising) were supported by the use of appropriate self-regulation strategies. The participants in the experimental group used the POW+PLEASE to write descriptive writing in several stages. POW, is a general planning strategy that includes picking an idea, and organizing the idea into writing using a graphic organizer. PLEASE, the second strategy helped the EFL students in the SRSD group basic elements of descriptive essay in the writing. As Welch (1992, cited in Akincilar, 2010) state, the PLEASE strategy addresses specific difficulties in paragraph writing, which are mostly related to prewriting planning, composition, and paragraph revision.

In fact, the SRSD model provided the EFL learners with a road map for writing paragraphs. It reminded them of carrying out the steps while writing. Moreover, in the SRSD group, the instructor moved away from a traditional writing class to a learner-centered class where she focused on the learners' preference and encouraged them to take more personal responsibility for their own writing performance. The EFL participants were encouraged to play an active role in shaping their learning. In fact, the SRSD instruction made learning faster, better, and more effective. In fact, the strategies used in the SRSD group enabled the EFL learners to achieve their learning potential and become individuals who managed their writing flexibly and independently.

Additionally, the SRSD instruction improved the EFL participants' reflective thinking more than the non-SRSD instruction by making them metacognitively aware of their cognitive processes, monitoring, analyzing, and evaluating their descriptive writing performance. It is vital for L2 teachers to be aware of the importance of developing an optimal positive estimation of language learners' reflective thinking, because reflective thinking can be interpreted as an integral process of metacognition. In other words, the EFL participants' reflection on the learning process led to increasing metacognitive knowledge

(knowledge about cognition) and skills (regulation of cognition). The findings of the current research support Bandura's (1986) theory of reciprocal determination and the concept of *agency*, which postulates that people, their behavior, and the environment in which they act reciprocally influence one another. The individual's ability to exert agency presupposes their awareness of what they do and their ability to develop strategies to control and regulate it. As Yun (2008) states, "reflection makes it possible for learners to utilize their metacognition knowledge about a task, self, and strategies during each stage of the regulator (carryover) process, planning, monitoring, and evaluating" (p. 26). In this light, the SRSD instructional approach proved to improve the learners' reflective thinking.

6. Conclusion

The present study examined the effect of SRSD on the descriptive writing skill of Iranian EFL learners. The results of the present study showed the use of SRSD instruction played an important role in improving L2 descriptive writing performance. Furthermore, the EFL participants who received strategy training (SRSD) performed better than those who did not.

The SRSD instruction helped the L2 learners recognize the purpose of their writing and improve the quality of their writing performance. It pushed the EFL learners to initiate and direct their own efforts to acquire new knowledge, skills, and strategies rather than relying on their teacher.

Furthermore, the results of the current study revealed that the SRSD instruction had an impact on Iranian L2 learners' reflective thinking. The SRSD instruction improved the participants' reflective thinking more than the non-SRSD instruction. Reflective thinking could be interpreted as an integral process of metacognition in that reflection could make it possible for the EFL learners to being metacognitively aware of their cognitive process and monitor, analyze, and evaluate their writing performance.

The findings of the present study tend to direct the attention of teachers of writing courses and course designers toward the importance of using SRSD as a possible way to move away from traditional instructions to process-oriented strategies to develop different types of writing. The current investigation is a step and further research is indeed required with a larger sample size, L2 learners from both genders with different proficiency levels, and other measurement instruments to make stronger generalizations. Likewise, future research can investigate the effects of SRSD instruction on other genres of writing.

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Appendix A
Reflecting Thinking Questionnaire (RTQ)

Instruction: Please fill in the appropriate circle to indicate your level of agreement with statement s about your actions and thinking in this course.

A—definitely agree
B—agree with reservation
C—only to be used if a definite answer is not possible
D—disagree with reservation
E—definitely disagree

Statement	A	B	C	D	E
1. When I am working on some activities, I can do them without thinking about what I am doing.					
2. In this course we do things so many times that I started doing them without thinking about it.					
3. As long as I can remember handout material for examinations, I do not have to think too much.					
4. If I follow what the lecturer says, I do not have to think too much on this course.					
5. This course requires us to understand concepts taught by the lecturer					
6. To pass this course you need to understand the content.					
7. I need to understand the material taught by the teacher in order to perform practical tasks.					
8. In this course you have to continually think about the material you are being taught.					
9. I sometimes question the way others do something and try to think of a better way.					
10. I like to think over what I have been doing and consider alternative ways of doing it					
11. I often reflect on my actions to see whether I could have improved on what I did.					
12. I often re-appraise my experience so I can learn from it and improve for my next performance.					
13. As a result of this course I have changed the way I look at myself.					
14. This course has challenged some of my firmly held ideas.					
15. As a result of this course I have changed my normal way of doing things.					
16. During this course I discovered faults in what I had previously believed to be right.					

Appendix B
"PLEASE" Strategy

Pick a topic, audience and type of paragraph.
List your ideas about the topic.
Evaluate your list.
Activate the paragraph with a topic sentence.
Supply supporting sentences.
End with a concluding sentence.
Evaluate your work.

P_____
L_____
E_____
A_____
S_____
E_____