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The Effect of Strategies-Based Instruction on the Improvement of EFL Learners' Writing Quality: A Sociocultural Approach

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Abstract

The present study draws primarily on Vygotsky's (1978) sociocultural approach and sets out to explore the effect of instruction of sociocultural writing strategies on the improvement of EFL learners' quality of writing. The study was conducted with two EFL writing classes randomly assigned to an experimental ($N = 22$) and a control group ($N = 21$) during a university term. Although the students in both classes worked in groups while practicing writing, only the experimental group was continuously taught to mediate their writings through different strategies and contextual mediations based on Engstrom's (1987) activity theory. The students' individual writing scores at the beginning and at the end of the experiment were compared, and the results convincingly proved that the experimental group made significantly more improvement in their writing ability than did the control group. The analysis of the recorded students' interactions in both groups revealed that the experimental group used almost all the sociocultural strategies while practicing writing, whereas the control group made a very limited use of only some of these strategies.

Keywords

group work, mediation, sociocultural approach, strategies-based instruction, writing

Introduction

The history of second language writing research has witnessed theoretical and methodological controversies over whether L2 writing is primarily cognitive or social. There is an increasing emphasis on the social and motivational context within which the writing process is embedded. This view originally emerged as a critique of purely cognitive approaches to the teaching and learning of writing. So writing is no more approached as an individually written product isolated from its context. This social view of L2 learning and, thus, writing has received extra impetus since the 1990s by an increasing interest in the application of the Vygotsky-inspired sociocultural theory (SCT) to second and foreign language research (e.g., Ellis, 1997; Nyikos & Hashimoto, 1997; Oxford, 1997; Scarcella & Oxford, 1992; van Lier, 1996; among others). Within this approach, writing is no more considered as a nonlinear process and an individual practice. Prior (2006) claims that cognitive paradigm is too narrow in its understanding of the context, so the writing task is approached within the SCT. It best describes the context of writing activity in its totality. It offers a perspective within which writing can be examined as a social practice, with students as active participants in constructing learning processes, and as a result, the interaction between different factors can be explored. Lantolf (2000, 2002) states that the

central and distinguishing concept of the SCT is that the human mind is always and everywhere socially and semiotically mediated within the "zone of proximal development" (ZPD), or "the domain of knowledge or skill where the learner is not yet capable of independent functioning, but can achieve the desired outcome given relevant scaffolded help" (Mitchell & Myles, 2004, p. 196).

On the other hand, research on L2 writing has shifted its focus from concentration on the final product of writing to investigating the process of writing. This necessitates underlining L2 writing strategies to discover the actions and the behaviors of L2 writers while producing written texts. A myriad of studies have focused on the cognitive strategies the L2 writers use while writing, such as planning, analyzing, synthesizing, reasoning, and monitoring (Cumming, 1989; Cumming, Rebuffot, & Ledwell, 1989; Zamel, 1983). However, with the recent shift from the cognitive to the sociocultural approach to writing, L2 writing studies have reconceptualized writing strategies within the sociocultural framework.

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However, very few studies have examined the use of L2 writing strategies within a sociocultural framework, which are mainly descriptive in nature (e.g., Anton & DiCamilla, 1998; De Guerrero & Villamil, 2000; Fernandez, Wegerif, Mercer, & Rojas-Drummond, 2001; Lei, 2008; Leki, 1993; Storch, 2005; Storch & Wigglesworth, 2007; Villamil & De Guerrero, 1996; Wigglesworth & Storch, 2009). For instance, Anton and DiCamilla (1998) examined the use of L1 as a powerful strategy of semiotic mediation in providing scaffolded help in the collaborative activities. De Guerrero and Villamil (2000) demonstrated how two students, one as a writer and one as a reviewer, learn from each other (a mediation strategy) during interaction in a peer-review activity. Villamil and De Guerrero (1996) report five strategies used by L2 learners while revising their writing. These strategies included using symbols and external resources, using L1, providing scaffolding, resorting to interlanguage, and vocalizing private speech via social interaction in L2 writing.

A relatively recent study by Lei (2008) investigated EFL learners' writing strategy use based on activity theory (Engstrom, 1987). She found four types of writing strategies from two learners' mediated actions, that is, artifact-mediated, rule-mediated, community-mediated, and role-mediated strategies. She argues that L2 writing involves strategic mediation of various resources in the world, and the use of writing strategy is oriented toward a writer's goals in society.

Nonetheless, all the L2 writing strategies reviewed above are descriptive in nature. That is, they have explored whether and to what extent the L2 students use the sociocultural writing strategies. None of these studies, however, has focused on whether teaching these strategies could help L2 students mediate their writing more strategically through using a variety of writing strategies and, as a result, develop their writing ability. As Lei (2008) contends, "Although L2 learners might have already used some of these strategies, they may not always be aware of the mediated processes or potential strategies and be able to use them efficiently and with control" (p. 232). As an impetus for further research on sociocultural writing strategies, Lei (2008) underlines the importance of L2 writing teachers raising the students' consciousness about these strategies. In a similar vein, Van der Veer and Van Ijzendoorn (1985) argue that, according to activity theory, the natural upward movement from lower order processes to higher order ones can be influenced by direction and instruction.

The present study, hence, investigates the impact of instructing the writing strategies within a sociocultural framework on the improvement of L2 students' writing ability. Although acknowledging that group work may provide opportunities for creative thinking, this research is specifically concerned with the use and nonuse of sociocultural strategies in groups and the possible effect it brings about on the quality of essay writing as a result of instruction and consciousness raising. Triggered by the aspiration to address the current gap and further extend sociocultural research in L2

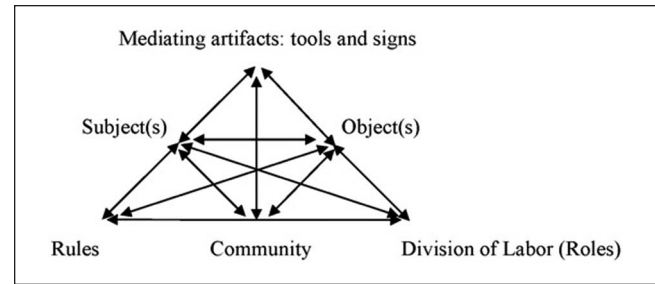


Figure 1. Activity system.

Source: Based on Y. Engstrom 1987 (cited in Lantolf and Thorne, 2006, p. 222).

writing, this study draws primarily on the SCT, activity theory, and concept of mediation (a key element in the SCT) to investigate the effect of strategies-based instruction within the sociocultural framework on the quality of writing. Writing quality is expected to meet the five content criteria of communicative quality, organization, paragraphing, cohesion, relevance, and adequacy (Jacobs, Zinkgraf, Wormuth, Hartfiel, & Hughey, 1981). In other words, the negotiation and interaction between learners, learning materials, tasks, and context, as well as using cognitive and sociocultural mediating strategies, make students active learners in the co-constructing of the knowledge.

Theoretical Framework of the Study

The activity system model (Figure 1), which is used to depict a framework for writing activities and mediating strategies, and their interaction with each other within the sociocultural approach, will be used as the theoretical framework of the present study. The system implies the multidimensionality of the context of second language writing and the possible dynamic relationships between the elements.

The model comprises the following components: (a) Subjects including students' attitude toward writing, motivation to write, their goals, and personal and world knowledge. The subjects' collaboration in class is the substantial strategy used during the writing. While in collaboration, the subjects' schematic knowledge is at play, and they continuously tend to utilize each other's factual, local, and sociocultural knowledge when brainstorming and constructing the text. (b) Rules include class norms such as the evaluation method adopted by the teacher. Coded errors are left to be revised by peers in groups. (c) Tools like guidelines, worksheets, and instructions, including cognitive writing strategies instruction such as planning, drafting, and revising. Tools can be internal or external, physical or symbolic mediating artifacts or signs. Concretely, tools include Internet-mediated strategies, literary work-mediated strategies, and L1- (through translation) and L2-mediated strategies (through negotiating right grammar, structure, vocabulary, and rhetoric). Through these strategies, the learners are asked to compare their written texts with a native's model or

sign-mediate their text in the process of writing. (d) Object (instructional objective). (e) Outcome (the development of written texts) is the individual writings intended to be high in quality. (f) Community (students and teachers in the classroom) in which the activity is carried out and by which the activity is negotiated. Campus-mediated strategies can be mentioned as an example. The students strategically communicated with people in the class and outside the class. (g) Division of labor (the roles to play and the jobs to be shared in learning activities, that of the learners and the teacher) assigns an active role to the students and a role of facilitator to the teacher. Among role-mediated strategies, one can refer to author-mediated strategies, which are specified as trying to establish authorship as an English writer or the consideration of the readers.

The model provides a proper theoretical foundation of the study in a holistic manner as the epistemological stance of the sociocultural turn defines human learning as a dynamic social activity that is situated in physical and social contexts, and distributed across persons, tools, and activities (Rogoff, 2003; Salomon, 1993; Vygotsky, 1978; Wertsch, 1991).

The Study

The study through a triangular data-elicitation approach (pre-test [treatment] post-test control group design) examines the effect of sociocultural strategies-based writing instruction on writing quality. The study intends to answer the following questions:

1. Does strategies-based writing instruction with a sociocultural perspective have any effect on the improvement of the students' writing ability and the quality of their writing?
2. To what extent do the students use the instructed sociocultural strategies in their interactions while working in groups?

Participants

Participants of the study comprised 43 English majors (8 males and 35 females) studying at Shiraz University, Iran. They participated in two intact essay writing classes taught by the first researcher. The two classes were randomly assigned to an experimental group ($N = 22$) and a control group ($N = 21$). The results of a proficiency test administered to the students of the two classes prior to the beginning of the term indicated that the two groups were equal with respect to their level of proficiency. The data were collected in the course of one semester. None of the students had attended an essay writing course before entering university.

Instruments

Two instruments were used in the present study. The first instrument of the study was the Oxford Placement Test (OPT;

2004) utilized to ensure the homogeneity of the two groups with respect to their general English proficiency.

The second instrument was Jacobs et al.'s (1981) scoring rubric. The rubric contains five subsections, namely, content criteria, organization criteria, vocabulary criteria, language criteria, and mechanics criteria. Based on this 100-point scheme, 30 points are allotted to the content of writing, 20 points to writing organization, 20 points to vocabulary use, 25 points to language use (mainly syntax), and 5 points to mechanics. On the whole, 50% of the score assigned to the writing quality is related to global aspects (content and organization) and 50% to the formal aspects (vocabulary, grammar, and mechanics).

Materials

Essays. Throughout the semester, the participants wrote seven essays, but only two essays—one written at the beginning of the experiment and one at the end—were considered as the materials of the study. The first essay, which was on an argumentative topic, was written by the students before they received any instructions on the organization and the process of writing an essay. The second was an argumentative essay, which was written by the students at the end of the semester. The topics of the first and the last essays were, to some extent, similar to control the genre as well as the lexical items, and the structures needed for writing on that particular topic. The topics of the two essays were as follows:

1. Do you agree or disagree with the following statement? Exams should be removed from the educational system of the universities and the students must be evaluated based on their performance in the classroom.
2. "Attending university classes should not be obligatory." To what extent do you agree or disagree with this opinion?

Audiotaped discourse. To triangulate the results of the study, the students' oral interactions while writing and practicing group essays were taped to see to what extent they used the learned strategies while going through the different stages of the writing process.

Data Collection Procedure

The data collection started 1 week before the commencement of the experiment. Although the students were all sophomores, to ensure that they were at the same level of proficiency, the OPT was administered to both groups. Then, in the first session of the course, the students were given an argumentative topic to write an essay before receiving any instruction on essay writing. This essay served as the pre-test of the study; the purpose was to ensure that the two groups were similar in terms of their tentative writing skill. These essays were then scored in terms of quality, based on Jacobs

Table 1. Sociocultural Strategies (Lei, 2008).

Artifact-mediated strategies	The Internet-mediated strategies Literary-work-mediated strategies L1-mediated strategies L2-mediated strategies
Rule-mediated strategies	Rhetoric-mediated strategies Evaluation-criterion-mediated strategies Time-mediated strategies
Community-mediated strategies	Campus-community-mediated strategies Society-mediated strategies
Role-mediated strategies	Author-mediated strategies Language-learner-mediated strategies

et al.'s (1981) scoring rubric. To ensure the reliability of the scores assigned to the essays, the two researchers scored 10% of the essays. The scores assigned to these paragraphs were subjected to Cohen's Kappa's interrater reliability test. The interrater reliability index acquired was .86. The rest of the essays were scored by the second researcher only.

Starting from the second session, the process of writing the expository essay and later the argumentative essay was presented to both groups. However, during the course, the instructor taught the sociocultural writing strategies to the experimental group and continuously asked them to mediate their learning by using these strategies.

Table 1 summarizes the sociocultural strategies adopted in the instruction of the experimental group. The strategies have been adopted from Lei's (2008) study.

The students in the experimental group were divided into four groups of four and two groups of three. Each group comprised students of three descending levels of A, B, and C, based on the writing scores they obtained on the first essay; in fact, based on their scores, the students were divided into three groups: 27% of the students with the highest scores were put in Group A, 27% with the lowest scores in Group C, and the remaining 46% in Group B. Care was taken to ensure that each group (the groups consisting of four students) was composed of one student from Group A, one from Group C, and two from Group B. There was one student from each group in the groups consisting of three students.

Then, in each session, depending on the usefulness and the importance of the strategies to each stage of the writing process, a combination of these strategies were introduced by the teacher and practiced in class. The students' writing practices in class were all in groups, and while they were working in groups, the teacher wandered around the class and, besides helping the students with their language problems when they arose, monitored the students, ascertaining that they used the strategies when needed. Each group was provided with an mp4 player to record all their interactions during the whole class time. After practicing writing each essay type (expository and argumentative) in groups (two for each), they were also

required to write essays of each type individually. In addition to the pre-test, they wrote two individual essays (one on each genre), the second of which (the argumentative essay), written at the end of the experiment, served as the post-test of the study. To sum, of the 16 class sessions, the students in the experimental group had 6 sessions of essay writing instruction along with writing strategies instruction, followed by practice, and 10 sessions of writing practice. The writings which were given content and form feedback by the teacher were revised collaboratively as well.

The procedure for the control group was similar to that of the experimental group, except that writing strategy instruction was not part of their class procedure. That is, the students of this group were taught the process of writing the expository and the argumentative essays, and practiced writing these essays in groups, but the strategies mentioned above were not taught to this group, and while working in groups, the teacher only discussed the writing problems with the students. In fact, it can be said that this group, too, enjoyed peer and teacher scaffolding, as it is the case in any cooperative learning activity, but they did not learn and practice the writing strategies. As in the experimental group, the students had 6 sessions of essay type instruction and practice, and 10 sessions of group practice in class. All the essays were examined in terms of content, organization, task fulfillment, and form to be compared later on within and between groups. Similar to the experimental group, the students of this group were asked to record their interactions while writing.

There were time and length limits on the individual essays (pre- and post-tests); the students were required to write essays of 300 to 350 words in 90 min.

Data Analysis

Quantitative data analysis was conducted to analyze the data collected from OPT and the essays. A series of independent-samples *t*-tests were run to compare the two groups' language proficiency and writing quality at the beginning and at the end of the term. Matched *t*-tests were used to compare each group's writing quality at the beginning and at the end of the term. The recorded interactions between the students were transcribed and coded with based on the sociocultural strategies indicated in Table 1.

Results

The results of the independent *t*-tests run for Oxford Placement Test and the writing pretest, presented in Table 2,

Table 2. Independent-Samples *t*-Tests on Homogeneity of the Two Groups.

	<i>t</i>	Significance
Placement Test	1.28	.23
Pre-test (Quality)	1.30	.19

Table 3. *t*-Test for the Difference Between the Quality Means of the Pre- and Post-Test of the Two Groups.

Group	M	SD	t	Significance
Experimental pre	11.76	2.96	1.30	.19
Control pre	12.97	2.98		
Experimental post	16.57	0.74	2.97	.007
Control post	14.90	2.40		

indicated that two groups were equal with respect to their general English proficiency and the writing ability.

Research Question 1: Does strategies-based writing instruction with a sociocultural perspective have any effect on the improvement of the students’ writing ability and the quality of their writing?

Mean scores on the quality of the individually produced writings by the students of the two groups at the beginning and at the end of the term were calculated and compared through an independent *t*-test. Table 3 illustrates the results of the comparison of the two groups in terms of writing quality at the beginning and at the end of the instruction.

As the Table presents, the two groups were similar in terms of their writing ability at the beginning of the term ($t = 1.30, p > .05$). However, the table reveals a significant difference between the means of the scores indicating the writing quality of the two groups ($t = 2.970, p < .05$) at the end of the experiment. The mean for the quality of the writing produced by the experimental group (82.85) is larger than that of the control group (74.50). That is, the participants in the experimental group who were taught the sociocultural writing strategies and practiced writing their essays utilizing these strategies outperformed those in the control group, who had not been explicitly taught these strategies. As a result, one can come up with the conclusion that the strategy instruction and context-providing scaffolding had a significant influence on the quality of the writing the participants in the experimental group produced.

Within-group improvement in writing quality was also investigated through matched *t*-tests, which were run for both groups. The obtained results are illustrated in Table 4.

Table 4. Matched *t*-Tests on Within-Group Comparison of Each Groups’ Improvement in Writing Quality.

Group	Mean pre	Mean post	t	df	Significance	Effect size
Experimental	11.76	16.57	7.65	20	.00	.75
Control	12.97	14.90	3.12	19	.006	.33

As it can be seen in the table, both groups have improved their writing quality at the end of the experiment, and the difference between the means of their scores on the first and the

last essays is statistically significant ($t = 7.65, p < .001$, for the experimental group and $t = 3.120, p < .05$, for the control group). To see how big the mean differences are, the effect size for the differences between the writing scores for each group was calculated. The results, as presented in Table 4, show that the effect size for the control group is at a moderate level, very close to the border between moderate and small, while that of the experimental group enjoys a large one (.33 and .75, respectively). This implies that receiving strategies-based instruction and mediation through cooperation seem to have more effect on the improvement of writing quality than cooperative writing without having a conscious knowledge of these strategies.

Research Question 2: To what extent do the students use the instructed sociocultural strategies in their interactions while working in groups?

The analysis of the transcripts of the recorded interactions in the experimental group revealed that they used the majority of the sociocultural strategies the teacher had taught, while negotiating in different stages of the writing process. Randomly selected pieces of discourse have been presented below to exemplify the use of the selected strategies by the students. It should be noted that, for the most part, students’ interactions were in Persian with English used occasionally when referring to the different parts of the text written or when reading parts of the text. To facilitate understanding, the English version of the interactions has been produced and presented in each section. The words said in English are **boldfaced**. Note that letters at the beginning of each exchange just replace the names of the students; neither do all similar letters indicate the same students nor do they correspond to Groups A, B, and C indicating the proficiency levels.

Rhetoric-Mediated Strategies

- A:** Ok guys, let’s read it again. **Introduction, body, conclusion.** Do you remember? We were supposed to review our paper once to see if it contains the three mains sections and then discuss different sections of the essay together and reach a conclusion.
- B:** Oh, yes. What was that? . . . **Rhetoric? . . . Rhetorical,** I think. Ok, so, let’s talk about the introduction first. Do you think it starts with a **general statement?** . . .

Time-Mediated Strategies

- A:** Look, we were supposed to spend more time on **planning and pre-writing** than on the other sections.
- B:** Ok, let’s take the time . . . We have one hour and 30 minutes, so why don’t we spend at least 15 minutes on **brainstorming.**
- A:** Ok, come on! I’m waiting for the ideas.

Evaluation-Criteria-Mediated Strategies

- A: Look at the scoring grid. It says **Excellent to very good** for the organization when the essay is characterized by **fluent expression, ideas clearly stated/supported, succinct, well-organized, logical sequencing, cohesive**.
- B: Let's start with **logical sequencing**. Do you think our **sequencing** is **logical**?
- C: Let's check the connectors . . .

Literary-Work-Mediated Strategies

- A: Hey, let's look at this **novel**. He said we could copy phrases and sentences from our literature books to promote the quality of our writing. I saw this connector, "**more often than not**." We can use it here.
- B: But, we need to make sure that this phrase fits our sentence.
- C: Let's insert it here . . .

The above-mentioned examples are just some of the strategies the students in the experimental group used while writing their essays.

The transcripts of the interactions of the controlled group just showed a very limited use of some of these strategies, the most important ones being *L1-mediated strategies* and *L2-mediated strategy*, which are usually used in such interactions particularly when the correct language form is concerned. This group, in spite of having the same resources at their disposal, made a very limited use of the relevant strategies or did not use them at all. For instance, although the scoring scheme was introduced to both groups, since the teacher did not teach *evaluation-criteria-mediated strategies* to the control group, they did not refer to it in their interactions while writing or revising their writing.

Discussion and Conclusion

The results of the present study showed that the experimental group, who were taught the writing strategies within a sociocultural framework outperformed the students in the control group in both strategy use and writing quality, although both worked in groups. The findings are theoretically justified and almost in line with most of the experimental studies that have a sociocultural foundation, as the review of the literature indicates.

Students in both groups formed small communities of practice doing the writing tasks progressively, except that those in the experimental group learned and used the writing strategies during the course and achieved more growth in the use of those strategies, and as a result, in writing quality, as compared with the control group.

The strategies taught to the participants of the present study were of mediational type. They were explicitly

introduced and used in class for the students to mediate their writings in all the three phases of the writing process. This type of teaching assumes a paradigm of teacher–student and peer–peer interaction, while a strong emphasis is placed on the active role of the learner as a strategy user, which is essential for becoming a self-regulated learner (Vygotsky, 1978). The teacher in the experimental group wandered round the class to ensure that the students used the strategies taught, negotiating the strategies with the students when needed. This negotiation is one of the vital factors in succeeding the mastery of the strategies and their implementation as well (Vygotsky, 1978). Some of these strategic behaviors displayed by the peers and the teacher in this study included intentionality, joint regard, affective involvement, communicative ratchet, contingent responsivity, and so on, which are all mostly among mediational process-related strategies awareness of which were intended to be raised in the experimental group along with the instruction of the other sociocultural strategies.

One of the strategies that the students learned in class and used while doing group work was articulation, which involves any method of encouraging students to express their knowledge, reasoning, or problem-solving processes in group work (Yang, 2011). In effect, the use of this strategy by the students of the present study provides a likely explanation for their higher use of revision strategies, which led to writing essays of a higher quality in their later independent writings. As a matter of fact, through articulation, students are encouraged not only to make revisions but also to provide reasons for revisions to their peers in groups. Such tasks require students to participate in generating language knowledge and evaluating the writing outcomes. In reflection, students compare their own problem-solving processes in writing with those of their peers (Liu, 2005). Such comparisons aid students in diagnosing their difficulties, and adjusting and negotiating their revision strategies until they achieve the goal of text improvement. An exploration of this kind has possibly enabled students to become more and more independent learners in producing high quality essays, as they are encouraged to select appropriate and effective peer review for improving their own texts.

Another kind of strategy practiced in the experimental group was time-mediated strategy, which has a basis from some well-founded studies emphasizing the temporal nature of composing. As with the group writing requirements, the students had the choice to allocate different amounts of time to negotiation while working collaboratively on different parts of the task.

According to Cumming (2001), L2 writers “seem to devote much attention and, as a result, much time, while they write to make decisions about the form of the second language or to finding resources such as appropriate words” (p. 5).

The participants of the study were also taught to assess their writing regularly based on criteria that the teacher offered them through feedbacks and the instruction on academic writing the

teacher gave them through the course. This strategy is categorized under evaluation-criterion-mediated strategies (Lei, 2008), which is a subcategory of rule-mediated strategies. Assessing writing and providing feedback is considered a social practice in nature. In this research, part of this process was fulfilled by the teacher and part of it by the students. In this process, teachers' preliminary feedback to students' writings served as an evaluation criterion to their future collaborative tasks in class, which was done for both groups. They were provided with an insight into what good English writing is and strove to meet the respective criteria for good writing.

The principles of peer feedback and collaboration are clearly consistent with a social constructivist framework (Peterson & McClay, 2010). Communication among the teachers and the students is essential for effective assessment, as Nicol and Macfarlane-Dick (2006) advocate an emphasis on productive, supportive talk. Garcia-Mayo and Pica (2000) claim that students can give each other useful input. Ellis (2003) also indicates that during group work exercises, students will provide each other with input that promotes their comprehension better than the input provided by the teacher, which is carefully planned beforehand. Therefore, they, along with Gass (1988), suggest that effective input that facilitates language acquisition should be *comprehended input* instead of a *comprehensible input*, which emphasizes the importance of students' production by which the actual level of students' understanding can be gauged.

In addition, the participants of the study were taught to mediate their writing through different artifacts such as the Internet, dictionaries, English literary works, writing textbooks, and cognitive and organizational strategies instructed by the teacher. The artifacts were many times introduced as an effective strategy on its own to mediate the writing tasks. For example, the Internet, which is one of the strategies introduced in the class, is one of the fastest spreading technologies of communication in human history. Theorists from many cognitive traditions (e.g., Vygotsky, 1978) have pointed out that technologies (an example of artifacts) are not external to human activity but rather intimately bound up with it.

All in all, the study explored how raising the students' consciousness about the L2 writing strategies would help them mediate their writing strategically in all the stages with diverse resources in the dynamic context of the writing and, as a result, improve the quality of their writing. To this end, the activity system model provided a proper framework to depict such a dynamic and cyclical process and to investigate each component's relationship to the other. In the experimental group, the whole context with all its elements was taken into consideration to improve the quality of the writings. The result of the treatment proved to be successful as the relatively large difference between the control and the experimental group's performance revealed. As it is evidenced in the study, there is also a perceptible change in the control group. That is, although they were not taught how to use the

collaborative writing strategies, they still made a limited use of some of these strategies, which can partly explain the improvement observed in their writing ability. The great difference in effect size calculated for each group indicates the experimental group outstandingly outperformed the control group and that is attributed to the right and conscious utilization of strategies within sociocultural approach. So it could be concluded that the sociocultural strategies-based instruction has the desired effect on writing quality in case they are explicitly introduced and practiced in the class. As Lei (2008, p. 232) asserts,

One implication that L2 writing teachers can draw from the study is that if students can raise their consciousness about the mediation of resources in writing processes, they might be able to strategically mediate their writing with a multitude of resources, find the true meaning of writing, and gradually develop themselves into better writers.

Suggestions for Further Research

With regard to the importance of learning style (defined as the general approach students use to learn a new subject or tackle a new problem) in group working, further research should address the influence of style harmony and style conflict in collaborative writing activities.

Transition from other- to self-regulation has not proved to be an easy task to accomplish (Rasku-Puttonen, Eteläpelto, Arvaja, & Häkkinen, 2003), but scaffolding activities, in the long run, might need less intervention on behalf of the teacher and perhaps might trigger longer episodes of collective thinking on behalf of the students. A comprehensive microanalysis of the nature of such transition, which finally ends in individuals' self-regulation, would be very illuminating with regard to the concept of scaffolding, which needs to be done in an extended period of time.

Further research can also concentrate on the use of these strategies in different stages of writing—pre, while, and revision—to see which one/ones are used more frequently in different stages and why.

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