

The Impact of Comparative Advance Organizers on Iranian EFL Learners' Essay Writing Ability

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Abstract – The present study was conducted to investigate the effect of comparative advance organizers on Iranian EFL learners' essay writing ability. To do this, a sample of 60 Iranian EFL learners was selected based on their performance on Preliminary English Test (PET). The participants were then randomly assigned to two equal groups of experimental group and control group and their writing ability was assessed at the beginning of the study. Then, the groups received treatments on writing. At the end of the study, a post-test was administered on both groups of the study in order to check the learners' collocation gain. The results of paired sample t-test showed that there is a significant difference between the pre-test and post-test results in the experimental group who had received comparative advance organizers treatment. Therefore, it was found that teaching comparative advance organizers significantly improved Iranian EFL learners' writing ability.

Keywords: writing ability, essay writing, advance organizers, comparative advance organizer

I. INTRODUCTION

Writing skill is a fundamental process in learning the language. Writing is a communicative skill that could be transferred to language learners as a set of practices in formal instructional contexts or other contexts. Thus, in both native and second or foreign languages it involves acquiring proficiency in terms of the language itself, writing strategies, as well as techniques and skills (Myles, 2002).

The skills involved in writing are highly complex. Foreign language writers need to focus on planning and organizing as well as spelling, punctuation, lexical and grammatical points. Hammann (2005) explains that writing is an essential part of thinking and learning in school context, and writing tasks are a critical tool for intellectual and social development. So, students' ability to present information and idea through writing has significant importance. Zamel (1987) states that "earlier hopes of finding the best method were based on the faulty assumptions that there was a best method and just had to find it, that teaching writing was a matter of prescribing a logically ordered set of written tasks and exercise, and that good writing conformed to a predetermined and ideal model" (p. 697).

Over a few decades, second language writing instruction has gradually developed from the traditional product-oriented approach to the process writing approach (Williams, 2003).

Instead of focusing only on the formal accuracy and the final product of writing, the process approach instills greater respect for individual writers and for the writing itself (Hyland, 2003). As Richards and Nunan (1990) mentioned, the process strategy, in contrast to the product strategy, concentrates on the means whereby the completed. This involves how ideas are refined, developed, and transformed when the writer writes, and subsequently rewrites. According to Sommers (1980) the writing process can be characterized as the process that creates and orders ideas derived from the interactions between teachers and students among peers by using class discussions or determining readers to stimulate the reaction of the readers throughout the writing process.

In relation to the quality of students' writings and their abilities in writing most of studies emphasized on the explicit teaching of writing strategies. Researchers like Bereiter and Scardamalia (1987) and Langer (2001) recommended teaching writing strategies. According to Bereiter and Scardamalia (1987) students' knowledge of writing strategies may affect how they plan their writing and their ability and their quality of writings. Zimmerman and Risemberg (1997) believed that the weak performance of low-proficient students in writing is not because of their lack of knowledge in language but it refers to their inability in using writing strategies.

Concerning writing skill, what teachers need to do first and guarantee is to provide learners with certain input before asking them to write. Input results in acquisition, which should be provided prior to teaching in any approach of language instruction that wants to be successful. Therefore, how the teacher provides input for students and what kind of input to be provided are worth-concerning issues. If input is going to change into intake, the instruction should be psycholinguistically motivated. For instance, the input can be provided prior to writing through advance organizers. Learners will be motivated to write when they obtain necessary vocabulary, grammar and writing style through advance organizers. A large number of studies have investigated the effectiveness of advance organizers. For instance, Ausubel's studies began with undergraduate students at the University of Illinois, where he determined that the introduction of unfamiliar material (e.g., the metallurgical properties of plain carbon steel) was better learned and retained when the treatment groups received various types of advance organizers. Additional research has shown that although advance organizers work well for all students when there is no prior knowledge of new material, their value declines for students without disabilities who possess prior knowledge (Ausubel, 1978; Bajt, 2004). However, Fisher, Schumaker, and Deshler (1995) felt that even when prior knowledge is present, visually graphic advance organizers can be a benefit to all students in an inclusive classroom, especially those with organizational difficulties.

As long as advance organizers do their job of introducing new learning concepts and linking or developing new schema to relate the material to, they can take many shapes including a simple oral introduction by the teacher, student discussion, outlines, timelines, charts, diagrams, and concept maps (Anderson, Yilmaz, & Wasburn-Moses, 2004; Bransford, 2004, Bundy, 2005). Kirkman and Shaw (1997) maintained there are two main types of advance organizers: expository and comparative. Expository organizers function to provide the learner

a conceptual framework for unfamiliar material and comparative organizers are used when the knowledge to be acquired is relatively familiar to the learner.

Advance organizers that build schema by providing new information are called expository organizers. Being familiar with the new material is a key to identifying which type of organizer you will want to use. You will want to use a comparative organizer when the subject is familiar - although not the same - to the learner. It helps the learner distinguish between familiar concepts or subjects. When the advance organizers help students to recall prior knowledge by activating existing schema, they are called comparative organizers (Bajt, 2004, Bundy, 2005).

This study explored the effect of comparative advance organizers on Iranian EFL learners' essay writing. The following research question was posed to address the purpose of the study:

- Does comparative advance organizer have any effect on essay writing of Iranian EFL intermediate learners?

II. METHOD

A. Participants

Participants of this study were 60 Iranian EFL learners who studied English language in language institutes located in the city of Tehran. Their age range was between 18 and 35. They were native speakers of Persian language. Their level of English language proficiency was determined through Preliminary English Test (PET).

B. Instruments

The instruments of the study were PET, writing section of IELTS and comparative advance organizers. This study used all parts of the PET to select a group of intermediate level L2 students. PET consists of four main parts of reading, listening, writing and speaking. All parts of the test were used in this study. The rationale for the selection of the PET was to select the homogenous intermediate level EFL learners.

Writing section of IELTS test was used two times, one as a pre- test to and one as a post-test. This test includes four parts such as task achievement, coherence and cohesion, lexical resource, grammatical rang and accuracy that took 3 hours. Moreover, writing section of IELTS is a standardized test of writing ability. ILETS test was scored by two raters. It is a holistic evaluation of an essay with scores of 0-9 which were defined by statements regarding the topic, organization and development, supporting idea, fluency, naturalness, appropriateness, grammatical and lexical correctness and choice in writing (Brown, 2004).

The comparative organizer was one type which was used to activate the learners' existing schemas. It consists of the images of written texts that were selected in order to activate learners' prior knowledge to write about the given topic. They were used in three stages to help

students organize ideas, simplify information and describe the relationships between facts and details of their writing tasks.

C. Procedures

The study began with the administration of a language placement test. The participants of this study were homogenized and selected as a result of their performance on PET. Then, they were randomly assigned into two groups, i.e., one experimental group and one control group.

The two groups in this study underwent two different types of treatment, and the pre-test and the post-test revealed any possible difference. This study was conducted through the following six phases.

In experimental group, the comparative advance organizer group was provided. Initially, the topic of neighborhood was introduced to the learners. The researcher designed advance organizers related to main components of neighborhoods including housing and communication systems, as well as their interrelationships with each other and the environment. The advance organizers helped the researcher build learners' prior knowledge about the flat expanses of different districts of the city, some factors to have an ideal neighborhood, such as neighboring the moderate climate, and access to highways and a large city nearby. The researcher wanted to help the students use this larger idea of interdependence with the physical and social environment as a framework for their exploration of the housing, transportation, communication, and commerce patterns. In so doing, photographs and illustrations were used as advance organizer. It helped the students organize the larger concepts related to a community and use this advance organizer as a frame for the details and learn about their own neighborhood, as a community they live in. Then, the students were asked to write one paragraph about their ideal neighborhood.

Afterwards, the researcher displayed the advance organizer on a classroom chart and direct students to the way that the information they are learning relates to the questions posed about recycling. The use of the advance organizer contained enough familiar information that served as a framework for the students to explore detailed information on the use of the Earth's resources. The researcher provided an organizational framework for the facts, figures, other details, and vocabulary they would encounter in their writing. In addition, involving students as actively as possible while using advance organizers was pursued during the presentation.

Over the treatment sessions, the students had eight writing sessions. After the treatment was over (two months), all the students took the similar version of IELTS essay test as the post-test this time. The groups of study were compared to each other and to their primary performance. The candidates were scored by two raters.

III. RESULTS

The descriptive statistics of participants' performance on pretest with regard to raters' scores is provided in Table 1.

Table 1: Descriptive Statistics of Groups' Performance on Pretest

		N	Minimum	Maximum	Mean	Std. Deviation	
Pretest	Experimental	Rater 1	30	0	2	1.12	.56
		Rater 2	30	0	2	1.41	.51
	Control	Rater 1	30	0	3	1.22	.85
		Rater 2	30	0	3	1.27	.78

A Pearson-product moment correlation coefficient was performed in order to test the inter-rater reliability of scores on pretest obtained by two raters in the experimental group. The result of correlation for the experimental group is presented in Table 2.

Table 2: Inter-rater Reliability of the Experimental Group on Pretest

		EAO Group - Pretest (Rater 1)	EAO Group - Pretest (Rater 2)
Experimental Group - Pretest (Rater 1)	Pearson Correlation	1	.954**
	Sig. (2-tailed)		.000
	N	30	30

** . Correlation is significant at the 0.01 level (2-tailed).

Table 2 shows that there is a significant relationship ($r = 0.95$, $p < 0.05$) between the scores of the pretest obtained by two the raters in the experimental group. Thus, the inter-rater reliability of scores for the experimental group is highly significant.

Another Pearson-product moment correlation coefficient was performed in order to test the inter-rater reliability of scores on the pretest results obtained by two raters in the control group. The results of correlation for the control group are presented in Table 3.

Table 3: Inter-rater Reliability of the Control Group on Pretest

		Pretest Control (Rater 1)	Pretest Control (Rater 2)
Pretest control (Rater 1)	Pearson Correlation	1	.962**
	Sig. (2-tailed)		.000
	N	30	30

** . Correlation is significant at the 0.01 level (2-tailed).

The results of another Pearson correlation for the control group revealed that there is a significant relationship ($r = 0.96$, $p < 0.05$) between the scores of the pretest obtained by the two raters in the control group. Thus, the inter-rater reliability of scores is highly significant.

In order to ensure that there was no significant difference between the experimental and control groups regarding their knowledge of writing on pretest, an independent sample t-test was performed. The results are shown in Table 4.

Table 4: Independent Sample t-test between EAO and control Groups on Pretest

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Pre-test	Equal variances assumed	2.17	.79	-.16	58	.213	-.083	.181	-.215	.108	

It was found that there is not any significant difference between the experimental and control groups ($t = .16$, $p > 0.05$) in their performance on the pretest. In other words, the learners' writing ability was similar at the beginning of the study.

Like the pretest, the same step-by-step statistical analyses have been done in order to test the research question of the study. The inter-rater reliability of the posttest scores of both groups was significant. The mean (arithmetic average) of two sets of posttest scores for both the experimental and control groups was calculated and was considered in this study. Table 5 provides this information.

Table 5: Descriptive Statistics of Experimental and Control Groups on Posttest

	N	Minimum	Maximum	Mean	Std. Deviation
Experimental Group - Posttest	30	3	8	6.65	.917
Control Group - Posttest	30	2	5	3.45	.714

In order to find an answer for the research question of the study in finding whether comparative advance organizer have any effect on essay writing of Iranian EFL intermediate learners, a paired sample t-test was performed between the scores of experimental group on pretest and posttest. The results are shown in Table 6.

Table 6: Paired Sample t-test between the Scores of Experimental Group on Pretest and Posttest

		Paired Samples Test					t	df	Sig. (2-tailed)
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Posttest- Pretest	5.38	2.31	.415	1.23	3.49	12.14	29	.00

The results revealed that there is a significant difference between the experimental group's scores on writing tests before and after the treatments of study ($t = 12.14, p < 0.05$). In other words, comparative advance organizers have a significant effect on the essay writing of Iranian EFL intermediate learners and the research question of the study was answered.

IV. DISCUSSION AND CONCLUSION

The purpose of the study was to find whether comparative advance organizers have any effect on essay writing of Iranian EFL intermediate learners. Based on the results of paired-sample t-test between pre-test and post-test of comparative advance organizer group, it was found that comparative advance organizers have significant effect on essay writing of Iranian EFL intermediate learners.

This study used comparative advance organizers in order to tackle directly explicit information in the new material. Therefore, comparative advance organizers were utilized “to instantiate schemata emphasizing conceptual versus declarative knowledge and providing rich supporting context” (Osman & Hannafin, 1994, p. 12). In fact, comparative advance organizers were applied to produce cognitive structure for newly information and also establish connection between learners’ prior knowledge and new information as well as they caused learners to encounter a cognitive load when they are kept in the working memory by learners and as a result, it led to a “less available working memory capacity to comprehend and store in long-term memory” (Kreiner, 1996, p. 354).

According to Osman and Hannafin (1994), comparative questioning “activate prior knowledge, induce higher order cognitive process, and provide a basis for meta-comprehension assessment” (p. 10). In addition, the findings of this study are consistent with previous research that confirms prior experience, the intrinsic nature of the material, and the organization of the instruction were determined by Marcus, Cooper, and Sweller (1996) as three sources of cognitive load that may hinder comprehension in the instructional context. Prior experience is relevant to the existence or lack of existing schemas available to be used in long-term memory. When prior experience is incorporated with the new information, automation of schema can be

assisted and consequently, the capacity of working memory will not be surpassed. If prior experience is little or no available, information needs to be prepared independently, which is likely to surpass working memory capacity, and as a result, the comprehension of the information would not succeed. Consequently, presence of prior knowledge is necessary to minimize cognitive load and maximize learning.

This study is also able to support the study done by Ayoobi and Hashamdar (2015) who investigated the effect of expository advance organizers on the writing of Iranian intermediate EFL learners. The results of statistical analyses showed that expository advance organizers have significant effect on writing of Iranian EFL intermediate learners.

The present study filled a gap on the effectiveness of two instructional techniques and strategies in writing instruction. This interactive nature of advance organizers allowed EFL learners to practice and engage in text structures within a more communicative setting. Training on advance organizers was distinctly different from conventional writing instruction methods as target structures, patterns and activities were generally presented within a cognitive context. Conversely, writing instruction that is currently presented in the conventional de-contextualized method in Iranian language classrooms can be revitalized within similar contexts using advance organizers. If students could apply the two techniques into their writing classes, they would make great progress in having a good command of this language skill.

REFERENCES

- Anderson, S., Yilmaz, O., & Wasburn-Moses, L. (2004). Middle and high school students with learning disabilities: Practical academic interventions for general education teachers- -A review of the literature. *American Secondary Education*, 32, 19-38.
- Ausubel, D. P. (1978). In defense of advance organizers: A reply to the critics. *Review of Educational Research*, 48, 251-257.
- Ayoobi, S., & Hashamdar, M. (2015). Boosting Writing Ability through Expository Advance Organizers. *International Journal of Educational Investigations*, 2(6), 127-135.
- Bajt, M. J. (2004). *Advanced organizers*. Retrieved from: http://wik.ed.uiuc.edu/index.php/Advance_organizers.
- Bransford, J. D. (2004). Schema activation and schema acquisition: Comments on Richard C. Anderson's remarks. In R. B. Ruddell, & N. J. Unrau (Eds.), *Theoretical models and processes of reading (5th ed.)* (pp. 607-619). Newark, DE: International Reading Association, Inc.
- Bereiter C., & Scardamalia, M. (1987). *The psychology of written composition*. Hillsdale, NJ: Lawrence Erlbaum.
- Brown, H. D. (2004). *Language assessment: Principle and classroom practices*. New York: Longman.

- Bundy, J. (2005). Advance organizer/281: Lesson plan & graphic. *An Online Portfolio by Jason Bundy California State University, Sacramento for the Internet-based Masters of Educational Technology: iMET*. Retrieved from: <http://imet.csus.edu/imet6/bundy/> .
- Fisher, J. B., Schumaker, J. B., & Deshler, D. D. (1995). Searching for validated inclusive practices: A review of the literature. *Focus on Exceptional Children*, 28(4), 1-20.
- Hammann, L. (2005). Self-Regulation in Academic Writing Tasks. *International Journal of Teaching and Learning in Higher Education*, 1 (1), 15-38.
- Hyland, K. (2003). *Second language writing*. Cambridge: Cambridge University Press.
- Kirkman, G., & Shaw, E. L. (1997). *Effects of an oral advance organizer on immediate and delayed retention* (Report No. TM027960). Washington, DC: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED415263)
- Kreiner, D. S. (1996). Effects of advance questions on reading comprehension. *Journal of General Psychology*, 123(4), 352-364.
- Langer, J. (2001). Beating the odds: Teaching middle and high school students to read and write well. *American Educational Research Journal*, 38(4), 837-880 .
- Marcus, N., Cooper, M., & Sweller, J. (1996). Understanding instructions. *Journal of Educational Psychology*, 88, 49-63.
- Myles, J. (2002). Second Language Writing and Research: The Writing Process and Error Analysis in Student Texts. *TESL-EJ*, 6(2), 1- 20.
- Osman, M. E., & Hannafin, M. J. (1994). Effects of advance questioning and prior knowledge on science learning. *Journal of Education Research*, 88(1), 5-13.
- Richards, J. C., & Nunan, D. (1990). *Second language teacher education*. Cambridge University Press.
- Sommers, N. (1980). Revision strategies of student writers and experienced adult writers. *College Composition and Communication*, 31(4), 378-88.
- Williams, J.G., (2003). Providing feedback on ESL students' written assignments, *The Internet TESL journal* (Online) IX(10), Retrieved February 22, 2014 from the World Wide Web: <http://iteslj.org/Techniques/Williams-Feedback.html>
- Zamel, V. (1987).Recent research on writing pedagogy. *TESOL Quarterly*. 21, 697-715.
- Zimmerman, B.J., Risemberg, R. (1997). Becoming a Self- regulated Writer: A Social Cognitive Prospective. *Contemporary Educational Psychology*, 22, 73- 101.