Original Paper

A Comparison of the Use of Cohesive Devices in EFL Learners' Performance on Independent vs. Integrated Writing Tasks

Gholamreza Hessamy[1*] and Samira Hamedi[1]

[1] Department of Applied Linguistics, Payame Noor University, Iran

[*] Gholamreza Hessamy, E-mail: yhessamy@yahoo.com

Abstract

This study was an attempt to compare and contrast the frequency of the use of cohesive devices in independent and integrated essays written by 95 upper-intermediate Iranian EFL learners to find out about any possible changes in the type and frequency of using cohesive devices due to the nature of the writing task. The participants were native speakers of Farsi between 18 to 30 years old, studying English as a foreign language in an English language center in Yazd, Iran. The sample included 58 female and 37 male students. They were asked to compose an integrated argumentative essay after reading a text and listening to a lecture on the same topic as it is designed in TOEFL iBT® writing test. The participants first completed an independent task which had a prompt to write about and then completed an integrated writing task with a two-week interval between the writing sessions. The tasks were taken from the TOEFL iBT® writing task. Results indicated that there was a significant difference in the use of almost all types of cohesive devices between the two conditions with the independent task producing essays with lower cohesive device counts. The results revealed that in terms of textual cohesion, the participants preferred using anaphoric references to cataphoric references while substitution and ellipsis in both independent and integrated sample writings were rarely used. The students were also found to be better at using references and lexical cohesion in their integrated writings than in their independent essays. Finally, it can be concluded that the integrated writing task has positive effects on the students' use of cohesive devices. The results of this study provide evidence on the effect of test method on writing performance and may advocate the use of integrated writing tasks to provide a better picture of students' writing abilities.

Keywords

independent writing task, integrated writing task, cohesive devices, reference, substitution, ellipsis, conjunction, lexical cohesion

1. Introduction

For EFL students, effective writing is a skill of major importance for academic success. Much of the

121

evaluation of their work, placement into required courses, and even acceptance into an academic program can be based in part or entirely on their performance in written work (Arapooff-Cramer, 1971). Yet even at a fairy advanced level of English study, this skill often remains an elusive goal. Many students control sentence level grammar enough to produce acceptable English sentences. However, knowing the form and meaning of words and being able to arrange them into grammatical sentences is not enough to produce a coherent, logical composition in English (Santana, 1974). Indeed, teachers frequently find that "foreign students who have mastered syntactic structures still demonstrate inability to compose cohesive themes, term papers, theses, and dissertations" (Kaplan, 1972. p. 296). Most probably, such students have already moved beyond the sentence boundary in their English study, but may have done so primarily within the framework of composition exercises that is controlled to varying degrees. A major stumbling block appears when they move or are required to move beyond these controlled exercises into independent or integrated writing tasks.

Since the introduction of direct writing assessment in language tests, timed essay tasks have been used as the primary method of assessing L2 writing ability. Hamp-Lynons and kroll (1997, p.180) call it the "snapshot approach" to writing assessment. In a typical independent writing task, writers rely on topic information drawn exclusively from their previously acquired knowledge, producing supposedly "original" discourse (Reid, 1993). This task has been criticized by many researchers (cho, 2003; Cumming, Kantor, Power, Santos, & Taylor, 2000; Hamp-lynos & kroll, 1997; Leki & Carson, 1997; Weigle, 2002 & 2004) for a number of reasons. As explained below, it falls short of effectively capturing the writing ability any academic writing task is supposed to measure.

Cho (2003) maintains that conventional essay test tasks neither are theoretically valid nor have a place in real life contexts. In other words, students do not usually write papers or reports from memory because they usually consult references or notes from their classes. Thus, reliance on source material is a dimension that independent tasks lack. Another problem encountered in independent tasks is topic familiarity. If students are given a topic without sufficient background knowledge, this variable would adversely affect students' performance. Consequently, construct irrelevant variance would confound test results.

Therefore, integrated tasks were suggested as an alternative to overcome some of the disadvantages of independent tasks. Research has shown that academic writing tasks are rarely done without using reference sources as a basis for writing (Cumming et al, 2000; Hamp-lynos & kroll, 1997; Leki & Carson, 1997; Weigle, 2002 & 2004). Lewkowicz (1997) also argues that integrated tasks tend to replicate the language situations that students often encounter in academic contexts. Thus, source-based tasks reflect authentic academic writing activities that students often perform in their classes.

Bachman (1990) defines authenticity in terms of the interaction between the test tasks and the cognitive processes of test takers. In integrated writing tasks, students are supposed to read a text or both read a text and listen to a lecture on the same topic, and then, write an essay according to given instructions.

Then, they can synthesize this information to produce their own text. This is consistent with research results indicating that writing about the content which has been read appears to enhance "higher order" thinking (Tirney & Shananhan, 2001).

According to Weigle (2004), source-based writing also provides background knowledge for test takers:

Another argument for using a source text as a basis for writing is that it provides a common information source for all test takers, putting them on a more equal footing in terms of the amount of background knowledge needed to respond to a writing task. Furthermore, a source text can serve to activate the writer's knowledge or schemata around a topic, helping them generate idea for their writing. (p. 30)

Thus, it seems that a reading text can provide equal opportunities for all test takers and minimize the effect of construct irrelevant variables.

The integrated writing tasks reflect the research attempts to forge bridges between reading and writing. During the last few decades there has been a relatively significant body of literature that supports a strong relationship between reading and writing (e.g., Carson, 1993; Grabe, 2001; Leki, 1993; Tierney & Shanahan, 2001). Carson (1993) argues that reading is good for writing; writing competence partially results from exposure to reading and good readers usually make good writers. This conclusion is logical given the shared cognitive processes between reading and writing. Reid (1993) summarizes this relationship in the following comment:

Both writing and reading are processes of making meaning. Both involve similar patterns of thinking and similar linguistic habits. Both are multifaceted complex processes that involve many sub skills. Both writing and reading activate schemata about the language, content, and form of the topic, and both lead to the exploration of those schemata in discovering meaning. (p. 43)

Spack (1988) also agrees with Reid that writing from and about texts can help foreign language (FL) learners become good academic writers.

In response to this growing theoretical and empirical evidence demonstrating the value of connecting reading and writing, many second language tests have included integrated writing tasks. For example, the Canadian Academic English Language (CAEL) Assessment includes a writing task that requires test takers to employ information from listening and reading texts to write an essay. Also, the Georgia State Test of English Proficiency (GSTEP) includes an integrated task that depends on reading two texts (Weigle, 2004). On a larger scale, the Test of English as a Foreign Language (TOEFL iBT) uses an integrated writing task which is based on a reading text and listening to a lecture on the same topic.

It is important to mention that hundreds of thousands of students take the TOEFL test in more than 180 countries worldwide for different purposes, such as university admission, immigration decision, and licensing (www. Toefl.org).This significant move from an international leader organization in language testing (ETS), can undoubtedly affect the direction of writing assessment.

The emerging trend in testing needs rigorous research addressing the possible challenges and expected

impact of the task characteristics in FL writing. This is simply because the writing assessment literature has few studies that focus on the comparison of independent and integrated writing tasks (Esmaeili, 2002, Plakans, 2009). Therefore, we certainly need more studies on the differences between traditional and integrated tasks.

Cohesion is one of the main features of writing which can be studied in independent vs. integrated writing tasks. In their review of the literature on cohesion in second language writing, Catalan and Espinosa (2005) identified four major strands of research: (a) the frequency of cohesive devices; (b) the relation between the frequency of cohesive devices, coherence, and writing quality; (c) comparisons between the use of the cohesive devices used by L1 and L2 writers, and between L2 writers of different L1s; and (d) the effect of genre or topic on the types of lexical cohesion used. A wider reading of the cohesion literature confirms a surprising lack of research investigating the use of cohesive devices by EFL learners in independent and integrated writing tasks.

Much of the material dealing with EFL writing has focused on construct validation of independent and integrated writing tests. As recently as 2009, Plakans found that "almost no research had compared the use of cohesive devices in independent vs. integrated writing tasks" (p. 61). Similarly, Esmaeili (2002) notes that "there are some research studies in comparison of independent and integrated writing but there are hardly any in the use of cohesive devices in independent and integrated writing tasks" (p. 185).

In order to deal with those rhetorical characteristics of the writing of EFL students that deviate from English standards, the first step would be determining just what those characteristics are, i.e., those aspects of English discourse that seem to cause problems for the students.

The decision to focus on the use of cohesive devices by EFL students' writing was made partly because cohesive structures can be identified in a way that makes objective investigation possible; other rhetorical characteristics pervading whole essays would require more subjective judgment at this time. This focus also developed out of a belief that since cohesion plays a significant role in English discourse, it must, as Byrne (2004) suggests, receive "careful attention in the programming of written practice" (p. 27), as well as more theoretical studies of discourse. The objective of this study, therefore, is to compare the cohesive devices used by EFL students to signal and link the functional units of discourse across their independent and integrated writing tasks. The results can be significant not only for writing assessment theory and practice, but also for teaching purposes especially in test preparation courses.

We tried to answer the general question of whether there exists any significant difference in the use of cohesive devices between independent and integrated writings of EFL learners by dividing it into five more specific questions, each addressing one of the elements of cohesion in English, namely, conjunctions, reference, ellipsis, substitution, and lexical cohesion.

1.1 Definition of Key Terms

Before presenting the definitions of key terms, it should be noted that some of the key terms used in this study might have slightly different operational definitions in other studies.

1.1.1 Independent Writing Task

Independent tasks refer to tasks in which test takers are required to produce a text without using any sources (Shavelson & Webb, 1991).

1.1.2 Integrated Writing Task

Integrated writing tasks refer to tasks in which students depend on information from a reading source to produce a text (Shavelson & Webb, 1991).

1.1.3 Cohesive Devices

Cohesive devices enable texts to stream in such a route as to preserve consistency and connectedness throughout a passage cohesive devices are text specific linguistic elements employed to assemble integrated, interpretable, and meaningful text (Halliday & Hasan, 1976). For text cohesion to be sustained and meaning prospect to be achieved, one component within a text must connect to a presupposed or subsequent component within the same text (Halliday & Hasan, 1976).

Halliday and Hasan, investigated the English linguistic system's textual elements, identified micro-level structural text forming features operating within the lexicogrammatical level. Cohesive device elements, structurally free standing, though dependent on one another, were classified into five cohesive tie domains, four of which were grammatical text features and one of which was a lexical text feature. The grammatical and lexical cohesive tie domains distinguished and described by Halliday and Hasan (1976) are (a) reference, (b) substitution, (c) ellipsis, (d) conjunction, and (e) lexical ties. Cohesive tie domain and sub-domain are defined below.

1.1.4 Reference

A reference is employed to join presupposed and subsequent components in the same passage. Reference tie sub-domains contain (a) personal references as pronominal (e.g., mine, his, I) or nominal (e.g., book, Ali, apple) references, (b) demonstrative references (e.g., that, these, the), and (c) comparative references (e.g., different, worse, so many). The link among reference ties relates to the semantic level and depends on internal to references to maintain text cohesion. The reference ties in the following set of sentences are internal and cohesive: "*Sara* jumped for *the apple*. *She* caught *it*." The words s*he* and *it* in the second sentence are intelligible, but only interpretable and meaningful when the reader knows the references of s*he* and *it* (Halliday, 1977).

1.1.5 Substitution

A substitution tie within a passage is employed to substitute one word for another, where the latter word in the passage functions as the substitution and is employed instead of repeating the former word or clause in the text. Substitution tie sub-domains include (a) noun replacements (e.g., Ali found a big *apple*. Maryam found a small *one*.), and (b) verb replacements (e.g., I suggested Ali would *do the*

assignments, and he *did*.). In both examples above, substitution tie (*one*, *did*) interpretation relies on the context established in the preceding sentence. Substitution ties occur more often in speaking than in writing (Halliday & Hasan, 1976).

1.1.6 Ellipsis

An ellipsis creates connection in writing and lets the writer to delete (a) a noun (e.g., Ali had a red *apple*. Mine was green.), (b) a verb (e.g., Ali bought a big house, but Maryam a small house.), or (c) a clause following the presupposed element (e.g., Q: Do you *study English*? A: Yes.). The intended supposition can be inferred from the previous sentence and context permitting the referent to be omitted from following sentences. As with substitution ties, ellipsis ties occur more frequently in speaking than in writing (Halliday & Hasan, 1976).

1.1.7 Conjunction

A conjunction connects two structurally independent units. Conjunction tie sub-domains contain (a) additive conjunctions (e.g., and, or), (b) adversative conjunctions (e.g., however, in addition, although), (c) causal conjunctions (e.g., due to, therefore, thus), and (d) temporal conjunctions (e.g., first, next, finally). The sentence, "Ali went to bed *but* he didn't sleep" has two independent clauses connected by the adversative conjunction *but*, letting the reader to connect the latter phrase to the former. (Halliday & Hasan, 1976).

1.1.8 Lexical Cohesion

Lexical cohesion is created through the writer's choice of specific vocabulary (Halliday & Hasan, 1976). New lexical items affect the lexical category's complexity and can be added to the lexical set. For example, the lexical set for *door* extends as the context in which *door* occurs changes such that "*door* is in contrast with *gate* and *screen*; also with *window, wall, floor*, and *ceiling*; with *knob, handle, panel*, and *sill*; with *room, house, hall*; with *entrance, opening, portal*" (p. 63). Lexical cohesion can also be achieved through derivations of the same word (e.g., *write, wrote, written, writing*).

Within the lexical domain, Halliday and Hasan (1976) recognized two lexical cohesive sub-domains - reiteration and collocation. A reiteration can be (a) a repetition of the same word (e.g., my house has a window. I am cleaning the *window*.), (b) a synonym or near synonym of the referent (e.g., she *exercise* every morning. *The aerobic* is refreshing.), or (c) a super-ordinate of the referent often preceded by the word *the* (e.g., I bought a *clothe*. I wear the *coat* everywhere!). 2. Collocations that are a combination of two or more words that fall in the middle between idioms (e.g., *spill the beans*) and free word combinations (e.g., *beautiful girl*) which allow a limited degree of substitution of their lexical components (e.g., *do your best* and *try your best* but not *perform your best*).

2. Methodology

2.1 Participants

The participants in the study were 95 upper- intermediate English learners selected based on their

TOEFL PBT score as the placement test at Safir English School, Yazd, Iran. Learners admitted to this level should score at least 80% or more on the written expression and structure section of *TOEFL®* PBT. Before joining this program, students had studied English for at least 8 years. They were between 18 to 30 years old. They were native speakers of Farsi who were composed of 58 female and 37 male students.

2.2 Instruments

One independent and one integrated writing task were selected from the *TOEFL iBT®* writing test. Both tasks were argumentative ones. The independent topic was chosen from one of TOEFL tests in Writing for the TOEFL iBT (Lougheed, 2008), and the integrated topic was taken from Longman Preparation Course for the TOEFL test: Next Generation iBT (Phillips, 2005). The participants had to complete the independent task in 35 minutes and the integrated task in 45 minutes.

2.3 Procedure

Before conducting the main study the researcher carried out the pilot study with 52 upper-intermediate EFL learners. The participants raised questions about how to use the reading text in their writing. Based on these questions, some modifications were made in the instructions of the integrated tasks. These modifications focused on giving guidelines on how to deal with the text and how to integrate reading information into their writing. Some observations were also made during the pilot study as follows:

• The students found the topics relevant and suitable;

• Many students gave credit to the authors when they copied directly from the text;

• Most students used the reading source in their writing as they benefited from the ideas and examples provided in the text;

The two writing tasks were given to the students on two different occasions. On the first administration, an independent task was given, and then two weeks later it was followed by an integrated task. For the integrated task, the participants were given the answer sheets in which the topic and the instructions were written. Then they were given a reading text about garlic and asked to read it in three minutes. After reading the text they listened to a lecture about the same topic. Afterwards, they started writing while they were allowed to refer to the reading during writing. Before working on the tasks, the participants were provided with some general information about the study without revealing the exact aim of the study, i.e., comparing the use of cohesive devices in the two different writing tasks. They were also given the chance to ask questions. They were asked to complete the demographic questions before working on the writing tasks. After the data were gathered, three raters were given the essays to check for cohesive devices. Each rater scored all the essays written by the participants.

The raters were three English teachers who had the experience of teaching and scoring English compositions in their classes for two to five years. It was believed that their experience with some training in using the rating scale could result in high inter-rater reliability.

The researchers provided the necessary briefings for the three raters before the scoring process. It

127

focused on how to use the scoring rubrics and to assign scores to the essays. For the coding of cohesive devices in the independent vs. integrated writing tasks, Halliday and Hasan's (1976) categories of cohesive devices were used to evaluate the students' writing samples. Writing samples from the pilot stage were used to familiarize the raters with the process. The raters first discussed the cohesive features of different essays and related them to the coding rubrics, then they were given essays from the pilot study and marked them based on the rubrics they had. Next, the researchers and the raters checked the scores given to each essay by the three raters. In cases of disagreement, more time was given to discuss the reasons for disagreement and a final score was assigned based on an agreement they reached to. Finally we made sure that the raters had enough familiarity with the coding rubrics and were able to match different cohesive devices with the rubrics systematically.

The results indicated that the training session was successful in familiarizing the raters with the scoring rubric and that they had enough experience to do the job. Cohen's Kappa for inter-coder reliability for cohesive tie identification was .86. This is consistent with many studies that stressed the importance of rater experience (Song & Caruso, 1996; Cumming, 1989) and rater training (Lumely, 2002; Weigle, 1994; Weigle, 1998) in establishing inter-rater and reliability.

3. Results

3.1 Reference

Reference is classified into three types: nominal reference, demonstrative reference, and comparative reference. In addition to the types of reference, the relationships among referential pronouns were also taken into account in our research. The uses of referential relationships were subdivided as anaphora versus cataphora and intra-sentential versus inter-sentential ties. Anaphoric nominal references or anaphoric third person pronouns consist of subject pronouns, object pronoun, and possessive pronouns. The data indicated that the participants in this study used considerably more nominal references in integrated writings than independent ones as shown in Table 1.
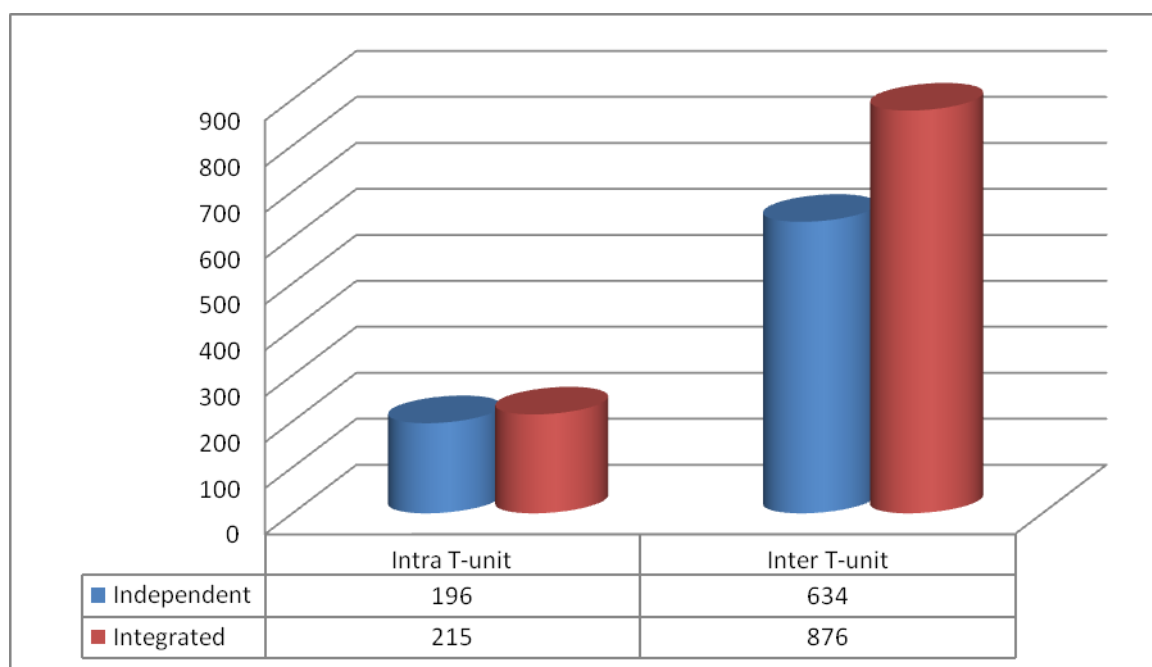
Table 1. The use of different types of anaphoric nominal reference

Types of Reference	Intra-sentential Nominal Anaphoric Reference	Inter-sentential Nominal Anaphoric Reference
Independent Writing Task	196	634
Integrated Writing Task	215	876

On the other hand, there was only one cataphoric nominal reference found in an integrated writing sample. As shown in Table 1, there were differences between independent and integrated writings

regarding the use of intra-sentential anaphoric nominal references. The participants included 196 intra-sentential anaphoric third person pronouns in their independent essays and 215 in their integrated writing. Similar to the use of intra-sentential nominal reference, participants in this study used a greater amount of inter-sentential anaphoric third person pronouns in their integrated writings. However, the number of inter-sentential nominal anaphoric references in the integrated essays was larger than that of independent ones. To be specific, participants used 634 inter-sentential nominal anaphoric references in their independent essays. On the other hand, they used 876 inter-sentential anaphoric references in their integrated writings (Figure 1).


Figure 1. The use of different types of anaphoric nominal reference

In addition to anaphoric nominal references, demonstrative references were also used in both independent and integrated essays. Unlike the nominal references, the demonstrative references are likely to be bonded with a noun that is located in a different T-unit. The demonstrative pronouns are divided into three groups: demonstrative-near, demonstrative-far, and the definite article. The participants included less demonstrative-near and demonstrative-far in their independent essays than in their integrated essays as shown in figure 2.

	demonstrative-far	demonstrative-near
■ independent	652	245
■ integrated	784	268
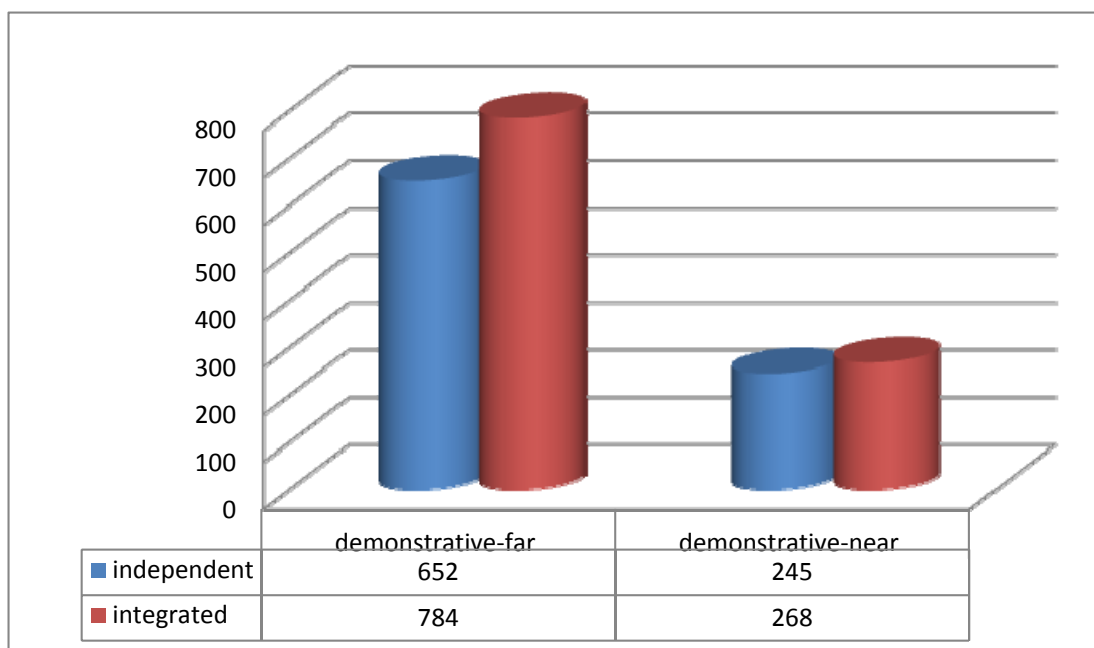
Figure 2. Comparison of the use of demonstrative pronouns

In addition, Figure 2 also reveals the differences in the use of demonstrative- near and demonstrative-far references in this study. The number of definite articles found in independent and integrated writings is shown in Figure 3. Like the demonstrative-near and demonstrative-far references, the integrated writings contained more definite articles than did the independent ones in this study.

	independent	integrated
■ definite article	794	1005
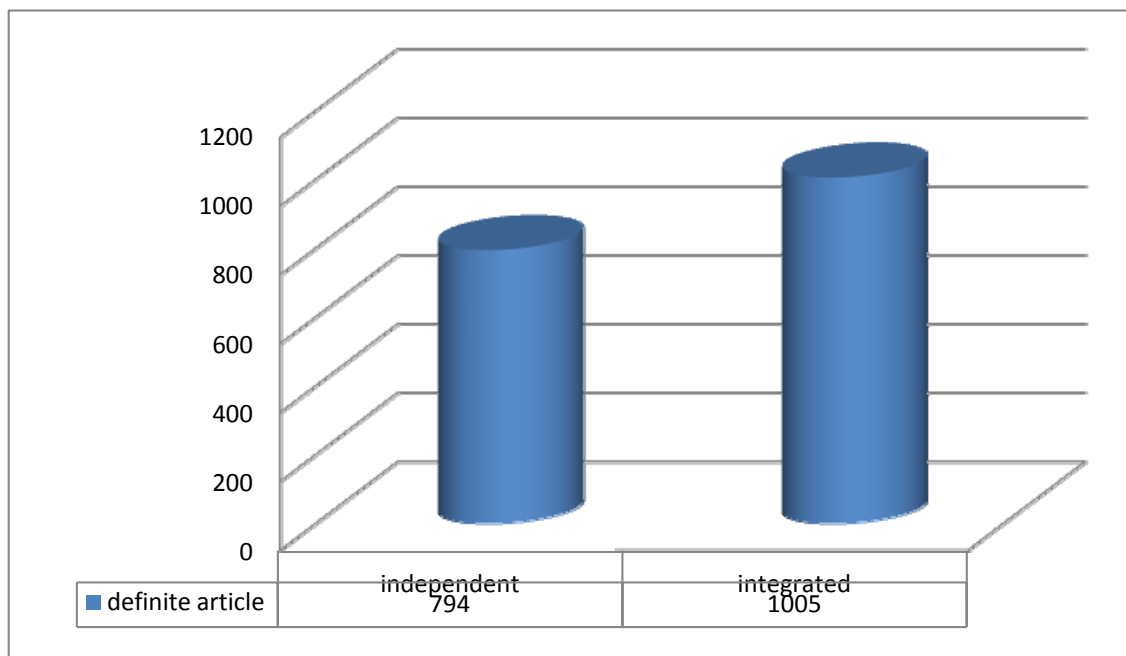
Figure 3. Comparison of the use of the definite article

The comparative references are divided into five categories: identity, similarity, difference, quantity, and quality. The findings of this study concerning comparative references are shown in Table 2.

Table 2. Comparison of the use of comparative reference in independent and integrated writings

Writing Tasks	Identity	Similarity	Difference	Quantity	Quality
Independent	5	26	7	34	19
Integrated	10	45	13	12	28

As it is presented in Table 3, the results of analysis of different types of reference in independent and integrated writing tasks rejected our first null hypothesis(Chi-Square (3) = 3.35, p = 0.341); therefore, it was concluded that there was a significant difference in the use of references between students' writings on independent and integrated writing tasks.

Table 3. Contingency of the use of reference

tasks	anaphoric nominal	demonstrative pronouns	definite article	Comparative Reference	sum
independent	830	897	794	91	2612
integrated	1091	1052	1005	108	3256
sum	1921	1949	1799	199	5868
Expected frequencies	anaphoric nominal	demonstrative pronouns	definite article	Comparative Reference	
independent	855	868	801	88.6	
integrated	1066	1081	998	110	

chi-square = 3.35 degrees of freedom = 3probability = 0.341

3.2 Substitution

There were eight cases of substitution found in the integrated writings while there was no use of substitution in the independent samples. The second hypothesis was also rejected (Chi-Square (1) = 6.12, p = 0.01). In other words, the results showed that there was a significant difference in the use of substitution in independent and integrated writing tasks written by EFL learners.
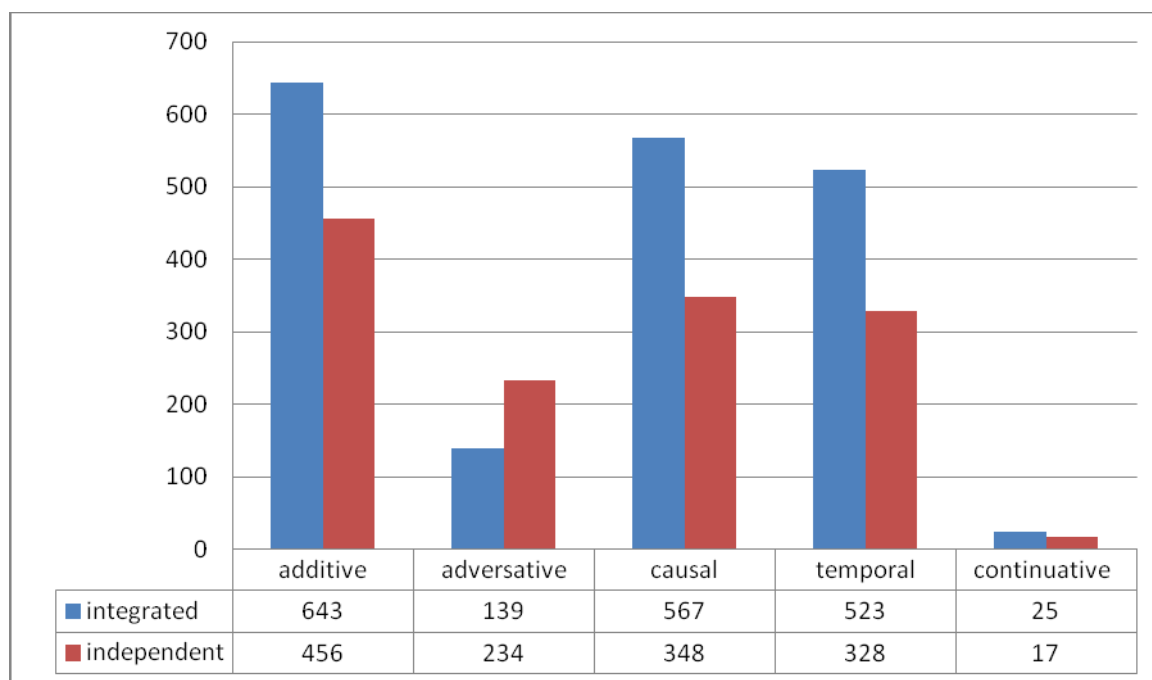
3.3 The Third Research Question: Ellipsis

There were altogether two elliptical ties found in all the samples in this research: one in an independent writing task and the other one in an integrated writing. Therefore, there was no significant difference in the use of ellipsis across the two task types. (Chi-Square (1) = 0, p = 1).

3.4 The Fourth Research Question: Conjunctive Cohesion

Conjunctive cohesion is classified into additive, causal, temporal, adversative, and continuative

conjunctive. The data revealed more extensive uses of conjunctive cohesion in the integrated essays than in the independent essays. The data from the ninety five integrated essays showed that the participants used 643 additive conjunctions in their integrated essays while they included 456 additive conjunctions in their independent essays. The details are given in table 4. A comparison between independent and integrated essays suggests that additive conjunctions are the most-frequently used type of conjunctions in both independent and integrated essays in this study. Furthermore, the data reveal that the participants used more cohesive conjunctions in integrated writing than they did in the independent. Independent and the integrated writings incorporated 1383 and 1897 connectors, respectively. Even though, the number of the connectors included in independent essays was less than that of the integrated samples, the participants still used adversative conjunctions more frequently in independent essays than in the integrated ones by a total of 234 versus 139.(Chi-Square (4) = 76.0, p = 0.00). The results showed that there was a significant difference in the use of conjunctions in independent and integrated writing tasks.

	additive	adversative	causal	temporal	continuative
integrated	643	139	567	523	25
independent	456	234	348	328	17

Figure 4. Comparison of the use of conjunctive cohesion

Table 4. Contingency of the use of conjunctive cohesion

tasks	additive	adversative	causal	temporal	continuative	sum
independent	456	234	348	328	17	1383
integrated	643	139	567	523	25	1897
sum	1099	373	915	851	42	3280
Expected frequencies	additive	adversative	causal	temporal	continuative	
independent	463	157	386	359	17.7	
integrated	637	216	529	492	24.3	

Chi-square = 76.0, degrees of freedom = 4, probability = 0.000

3.5 Lexical Cohesion

Four out of seventeen types of lexical cohesion that Indrasuta (1987) defines were found in the essays in this study. They were *same-item-lexical cohesive ties*, *synonym*, *super-ordinate*, and *collocation*. The findings showed that the ninety five upper-intermediate writers in this study all used collocations; this was most-frequently used type of lexical cohesion, followed by synonyms, repeating the same lexical items and super-ordinates. The frequency of occurrence of lexical cohesions that were identified in the independent and integrated essays is represented in Table 5.The results (Chi-Square (3) = 9.01, p = 0.02) rejected the fifth null hypothesis hence, there was a significant difference in the use of lexical ties across independent and integrated writing tasks.

	same-item	synonym	superordinate	collocation
integrated	345	678	127	1687
independent	298	436	87	1238
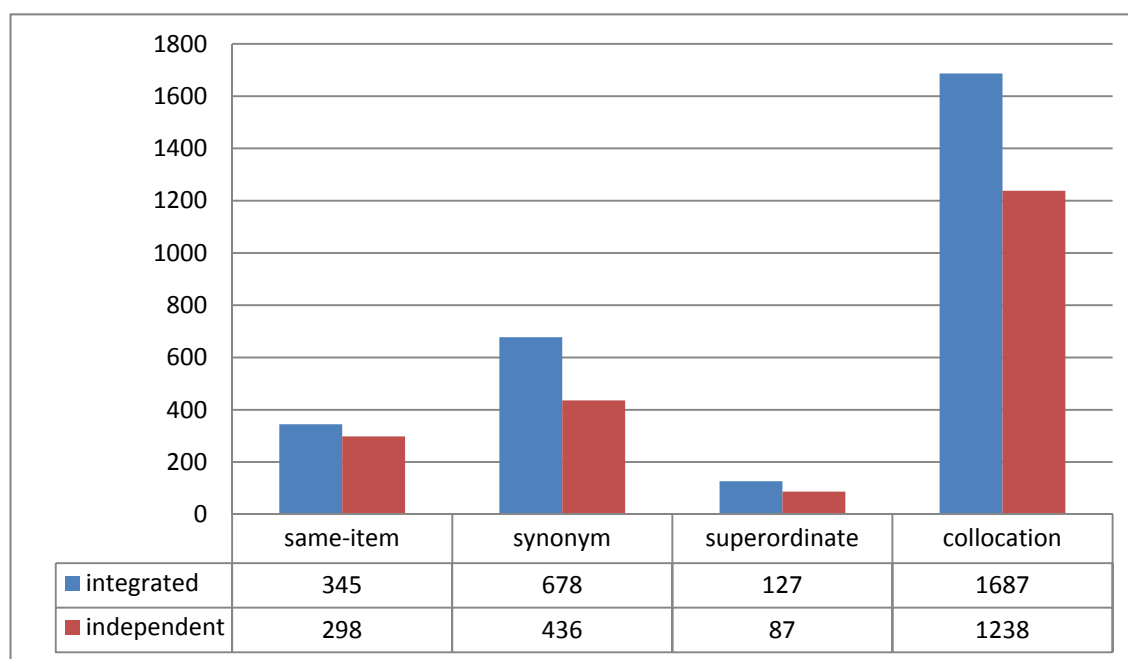
Figure 5. The frequency of occurrence of lexical cohesions in the independent

and integrated essays

133

Table 5. Contingency of the use of lexical cohesion

tasks	same item	synonym	subordination	collocation	sum
independent	298	436	87	1238	2059
integrated	345	678	127	1687	2837
sum	643	1114	214	2925	4896
Expected frequencies	same item	synonym	subordination	collocation	
independent	270	468	90	230	
integrated	373	646	124	695	

Chi-square = 9.01 degrees of freedom = 3probability = 0.029

By looking at the results as a whole, it can be concluded that ellipsis played a very little role, contributing only .01% of all cohesive devices in the integrated writings and .04% in independent writing. In fact, most of the participants did not use any ellipsis at all. Substitution played a slightly greater role, but still contributed only to 0.1% of all cohesive devices in the integrated writing samples and no occurrence in the independent essays. The students relied most heavily on reference, and more so in the integrated writing task. Within that category, however, comparative devices in each set contributed the least: from 2% to 6% of all cohesive devises used. The only major change in the relative use of pronominals and demonstratives occurred in the integrated essays, where demonstratives increased considerably, and were used more frequently than any other subcategory of reference ties.

The second most frequently used major category in each set was lexical cohesion. More specifically, collocation was used more frequently than any other subcategory of cohesion in independent (N=1238) and integrated writings (N=1687). The results indicated that the rank order in which the four subcategories contributed to overall cohesion remained constant in each of the two sets of essays. They could be ordered from the most to the least frequently used as follows: collocation, synonyms, repetition and super-ordinate.

The relative percentage by which conjunctive devices contributed to overall cohesion was significantly greater in the performance of the participants on the integrated writing. In each of the five sets, continuatives were used least frequently among the five types of conjunctions in the independent writing samples.

4. Discussion

The descriptive statistics showed that the overall frequency of cohesive devices in the samples of the integrated writing were higher than those of the independent task. The results are in agreement with a number of studies (Tierney & Shanahan, 2001; Spack, 1988; Grabe, 2001) demonstrating that source-based writing leads to some improvement in the dimensions of content and organization and

discourse as students make use of material presented in the source. For instance, Tierney and Shanahan (2001) conclude that writing about a content which has been read enhances higher order thinking, which can result in better discourse structure organization and the generation of more cohesive devices. The literature generally supports the improvement in the linguistic features of students' writing (Hayes, 1996; Grabe, 2001). This improvement is due to the fact that students usually attempt to model the structures and linguistic features included in the source texts. However, these studies are inconsistent with other studies that indicated that writing from a source can negatively affect the writing quality (Allison, Berry & Lewkowicz, 1995). A more detailed discussion of our findings in relation to each category of cohesion in English is presented below.

4.1 References

Given the basis of the two types of relationship of reference – anaphora and cataphora, it was observed that notwithstanding the substantial uses of anaphoric reference, there was only one cataphoric reference used by the students. This was most probably because of the fact that cataphoric relationship is infrequent in Farsi. The analysis of the study data showed that the participants used 876 inter T- unit nominal references in the integrated essays, while they used 634 inter T- unit nominal references in independent tasks. In their independent essays, 196 intra T-unit nominal references were found while 215 were found in the integrated writings.

Consequently, the data suggested that the integrated task can have a significant effect on the use of intra-T-unit and inter-T-unit anaphoric nominal references. The significantly larger number of inter-T-unit anaphoric nominal references revealed that EFL writers change their writing strategies when referring to nouns in integrated versus independent essays. That is, the writers used nominal references to refer to the same preceding nouns in the integrated task more often than they did in the independent task. In independent argumentative writing, writers reiterate the same nouns more frequently than in integrated essays without substituting nominal references for them. This is most likely because independent writing conventions motivate writers to use repeated lexical items in the same T-unit and between two adjacent T-units, which is typically done less frequently in integrated writing tasks.

Furthermore, 245 demonstrative-near references appeared in the independent essays. The demonstrative-far references used included, for example, in, "who is that?" in which *that* fills in the noun position, whereas, the demonstrative-far in that T-unit also carried the meaning of "distant" in that context. That is to say, using the third person omniscient point of view, the writer saw herself as a narrator who wanted her involved with her writing as much as possible by including questions and a moral lesson. Probably, the demonstrative-far "that" in the independent writing was selected for two purposes. The writer intended to minimize the distance between her and the readers as a group, while emphasizing the distance between her group and "that" entity (an assumption) in the independent writing. Nonetheless, in addition to creating the distance, the demonstrative-far in the integrated writing

was also frequently used as a definite article as in, "that idea" where the demonstrative-far– *that* was in front of a repeated noun– *idea*. Therefore, the demonstrative-far "*that*" functioned as a definite article "*the*" in this T-unit. The considerable difference in the frequency of distant-demonstrative references employed is most likely resulted from the replacement of distant-demonstrative with the definite article *the* in the integrated writings.

Comparative references were used more frequently in the integrated writings than in the independent ones. Ninety one comparative references were used in the independent writings, and 108 in the integrated writings. An example of comparative cohesion in an independent writing is the use of quantitative numbers in "My parents' program had 5 phases, introduction, presentation, two workshops, and conclusion." Although the writer fails to use a proper indefinite article, e.g., *an introduction*, *a presentation*, and *a conclusion*, the word two is related to the number of workshops which are two of the five program phases that were mentioned earlier in the T-unit.

Moreover, considering each subtype of comparative reference, the data indicated that they employed the same types of comparative references in their independent and integrated tasks, including *similarity*, and *quantity and quality* comparative references. The third mostly-used comparative reference was quantity comparative reference. A possible justification for the frequent occurrence of quantity references is probably the fact that the number is the most self- evident comparison among other types of comparatives such as difference, and identity. Expectedly, both independent and integrated writings employed similarity figures as the largest type of comparative reference. Additionally, the data from the writings indicated that integrated writings were more prone to the details, especially on the qualitative aspects of the entities.

4.2 Substitution

There were six verbal and two nominal substitutions found in the integrated writings in this study. As noted earlier substitution relates to the syntactic aspect of the referred lexical items, while the reference only represents the meaning of the preceding noun. However, substitution has more complex rules than referential pronouns. The scarce occurrence of substitution in the participants' writing was likely to have been determined by the participants' knowledge of L1 since Farsi allows the speaker or writer to repeat the same words more frequently than does English. Furthermore, considering the participants' educational background they, were unlikely to have received explicit instruction for substitution in English. Therefore, the absence of substitution could be predictable in time-controlled writing, in which writers are most probable to use the syntax and lexicon they are most accustomed to in their writings.

4.3 Ellipsis

Overall there was only one ellipsis found in an independent essay and one instance in an integrated essay. The scarecity of ellipsis in both independent and integrated writings reveals that the participants had very limited knowledge of the use of ellipsis in writing tasks. Compared to other types of cohesive devices, such as reference and conjunctions, ellipsis is less likely to be used, even by upper

136

intermediate EFL writers because of its convoluted grammatical rules.

4.4 Conjunction

Conjunctions were vastly used in this study. Integrated writings included more conjunctive ties than independent ones. The most-frequently used types of conjunctive cohesions ranged, in a descending order were *additive*, *casual*, *temporal*, *adversative*, and *continuative conjunctive cohesions*.

The participants could relate the listening and reading materials to their essays more productively in integrated task than they could for a short independent writing prompt. The most frequently used type of conjunctive connector in both independent and integrated writings were the *additive conjunction*. This most likely resulted because the additive conjunctive is the most fundamental, least complex type of connector, and the additive connectors like *and*, *and also*, and *or* typically can be learned and retained in the early stages of learning English because of their frequent use in all skill domains.

Causal and temporal conjunctives were utilized comparatively more in the integrated writings than independent writings in this study. Another significant finding with regard to the use of comparative conjunctive ties was the use of *continuative conjunctive cohesion*, which is rather scarce in English writings. A feasible justification of the limited use of continuative conjunctives was the role of Farsi Language. More specifically, the continuative conjunctive is spared in formal Farsi writing conventions. The Farsi language uses noun clauses to introduce a new issue in a formal writing. Colloquial Farsi language, such as daily conversation, permits the utilization of continuative conjunctions such as *then* followed by a dependent clause when the speaker wants to signal continuation of a conversation or to change the topics of a conversation.

4.5 Lexical Cohesions

Lexical cohesions were the second largest group of cohesive devices that the participants in the present study utilized to maintain the unity of their writings. The data indicated that the participants used more repetition in their integrated writings than their independent tasks. The analysis also revealed that participants used more lexical cohesions in integrated writings than in independent writings. The most referred types of lexical cohesions in the integrated writings were collocations and synonyms. The same item repetition and super-ordinates were less common in both independent and integrated essays. Similar to integrated writings, the independent writings included collocations as the most frequently used lexical cohesion, followed in the frequency by synonyms, same item repetition and super-ordinate terms respectively.

The findings in this research suggest that Iranian upper intermediate English as L2 writers changed their writing strategy when substituting proper nouns in integrated and independent writing tasks. Participants chose to use nominal references as alternatives to referred nouns in integrated writing tasks more than they did in independent writing tasks.

Just like the frequent use of nominal pronouns, demonstrative references were included in the independent writings less than in the integrated writings. This is because the integrated writing trigged

137

the use of definite article by presenting it in the listening and reading texts.

In addition, task type is likely to affect the use of comparative references in writings. The findings revealed that Iranian upper intermediate learners incorporated more comparative references in integrated writings than independent writings. Moreover, the data also showed that participants were more likely to use more comparative elements such as similarity and quality in integrated writings than in independent writings.

The findings of conjunctive cohesive ties most likely indicated that the English learners are more concerned about connecting their narrative essays through the use of conjunctions in integrated rather than in independent writing. The additive conjunctions are the most frequently used type of conjunctive cohesions in both independent and integrated writing tasks.

The data in this study revealed that independent and integrated task types cause different uses of lexical cohesive devices. Participants included significantly different number of collocations in their integrated writings compared to their independent writings. The participants utilized synonyms and repeated the same lexical items as the second and third most frequently used lexical cohesions in both their independent and integrated writings. Moreover, the results also indicated that both integrated writing task via listening and reading prompt triggered more lexical sets in writers' minds.

The questions this research posed were about the differences of discourse markers such as reference, substitution, ellipsis, lexical cohesion, and conjunctions between independent and integrated writing tasks written by Persian-English bilinguals. The findings suggested that the participants in this study were more familiar with using anaphora to refer to a pronoun and a referred noun. This assumption was drawn from the data from the study, in which there was only one cataphoric tie between nominal pronoun and referred noun. Moreover, the data in both independent and integrated writing tasks from ninety five participants were likely to indicate that the referred noun and the nominal pronouns were likely to be located in different T-units.

The findings in this research suggested that Iranian upper intermediate English L2 writers changed their writing strategy when substituting proper nouns in independent and integrated writing tasks. Persian bilinguals chose to use nominal references as alternatives to referred nouns in integrated writing task more than they did in independent one.

Just like the frequent use of demonstrative far, demonstrative near references were included in the integrated essays considerably more than the independent essays. Furthermore, the Persian language lacks the definite article *the*. Therefore, Persian upper intermediate L2 English writers were required to change their syntactic schema when describing the definiteness of nouns while composing English writing essays. Furthermore, Task type seems likely to cause differences in the use of demonstrative references since the participants include nearly the same significantly more of demonstrative pronouns in integrated writing tasks than independent ones.

Nonetheless, task type is unlikely to affect the use of comparative references in the essays. The findings

revealed that Persian upper intermediate English L2 writers incorporated slightly more comparative references in integrated writing tasks than in the independent ones. Moreover, the data also showed that the participants were more likely to use more comparative elements in integrated essays than in independent ones as the result of copying from the reading text.

Due to the fact that there were only eight substitutions found in four integrated writings, task type also seems unlikely to be a variable for the occurrence of substitution. Two plausible explanations for the infrequent use of substitutions in independent and integrated writing may be the influence of L1 knowledge and the lack of explicit instruction of substitution usage in L2.

Even though there were two elliptical ties found in one integrated essay and another in an independent essay created by male writers, the numbers of ellipsis utilized were inadequate to conclude that task type was the factor for the variation. Nevertheless, the elliptical finding revealed that ellipsis is a complicated syntactic feature of L2 English language, and even upper intermediate language learners are unlikely to include them among their rhetorical alternatives.

The findings of conjunction cohesion most likely indicated that Persian-English upper intermediate bilinguals are more proficient in connecting their essays through the use of conjunctions in integrated writing task rather than in independent tasks. The additive conjunctions are the most frequently used type of conjunctive cohesions in both independent and integrated essays. Furthermore, the numbers of adversative conjunctions found in this research suggested that task type affects the use of adversative conjunctions in the independent essays more than the integrated ones. Specifically, Persian upper intermediate English L2 writers seem likely to incorporate more casual conjunctions in their integrated writing than did in the independent one.

Finally the data in this study revealed that task type does cause the different uses of lexical cohesions. The participants included significantly the different number of lexical cohesions in their independent and integrated writings. The participants continued using the collocation as the most frequently used lexical cohesions in both their independent and integrated writings. Moreover, the results also indicated that the participants are more knowledgeable of synonyms than supper-ordinates.

The conclusions to the study were as follows: (a) Reference, conjunction, and lexical tie sub-domain use was more frequent in the integrated writing tasks than the independent ones with demonstrative pronouns and collocations used the most to maintain cohesion, and substitution and ellipsis ties used the least to maintain cohesion; and (b) the participants' achievement in the use of cohesive ties in integrated essays could be attributed to presentation of authentically cohesive listening and reading sections as prompts for writing.

5. Conclusion

The questions this research posed were about the differences of discourse markers such as reference, substitution, ellipsis, lexical cohesion, and conjunctions between independent and integrated writing

tasks written by Persian-English bilinguals. The findings suggested that the participants in this study were more familiar with using anaphora to refer to a pronoun and a referred noun. This assumption was drawn from the data from the study, in which there was only one cataphoric tie between nominal pronoun and referred noun. Moreover, the data in both independent and integrated writing tasks from ninety five participants were likely to indicate that the referred noun and the nominal pronouns were likely to be located in different T-units.

The findings in this research suggested that Iranian upper intermediate English L2 writers changed their writing strategy when substituting proper nouns in independent and integrated writing tasks. Persian bilinguals chose to use nominal references as alternatives to referred nouns in integrated writing task more than they did in independent one.

Just like the frequent use of demonstrative far, demonstrative near references were included in the integrated essays considerably more than the independent essays. Furthermore, the Persian language lacks the definite article *the*. Therefore, Persian upper intermediate L2 English writers were required to change their syntactic schema when describing the definiteness of nouns while composing English writing essays. Furthermore, Task type seems likely to cause differences in the use of demonstrative references since the participants include nearly the same significantly more of demonstrative pronouns in integrated writing tasks than independent ones.

Nonetheless, task type is unlikely to affect the use of comparative references in the essays. The findings revealed that Persian upper intermediate English L2 writers incorporated slightly more comparative references in integrated writing tasks than in the independent ones. Moreover, the data also showed that the participants were more likely to use more comparative elements in integrated essays than in independent ones as the result of copying from the reading text.

Due to the fact that there were only eight substitutions found in four integrated writings, task type also seems unlikely to be a variable for the occurrence of substitution. Two plausible explanations for the infrequent use of substitutions in independent and integrated writing may be the influence of L1 knowledge and the lack of explicit instruction of substitution usage in L2.

Even though there were two elliptical ties found in one integrated essay and another in an independent essay created by male writers, the numbers of ellipsis utilized were inadequate to conclude that task type was the factor for the variation. Nevertheless, the elliptical finding revealed that ellipsis is a complicated syntactic feature of L2 English language, and even upper intermediate language learners are unlikely to include them among their rhetorical alternatives.

The findings of conjunction cohesion most likely indicated that Persian-English upper intermediate bilinguals are more proficient in connecting their essays through the use of conjunctions in integrated writing task rather than in independent tasks. The additive conjunctions are the most frequently used type of conjunctive cohesions in both independent and integrated essays. Furthermore, the numbers of adversative conjunctions found in this research suggested that task type affects the use of adversative

conjunctions in the independent essays more than the integrated ones. Specifically, Persian upper intermediate English L2 writers seem likely to incorporate more casual conjunctions in their integrated writing than did in the independent one.

The data in this study revealed that task type does cause the different uses of lexical cohesions. The participants included significantly the different number of lexical cohesions in their independent and integrated writings. The participants continued using the collocation as the most frequently used lexical cohesions in both their independent and integrated writings. Moreover, the results also indicated that the participants are more knowledgeable of synonyms than supper-ordinates.

The conclusions to the study were as follows: (a) Reference, conjunction, and lexical tie sub-domain use was more frequent in the integrated writing tasks than the independent ones with demonstrative pronouns and collocations used the most to maintain cohesion, and substitution and ellipsis ties used the least to maintain cohesion; and (b) the participants' achievement in the use of cohesive ties in integrated essays could be attributed to presentation of authentically cohesive listening and reading sections as prompts for writing.

Finally the following conclusions can be drawn from the study:

1) Integrated writing tasks have positive effects on the students' use of cohesive devices in terms of both the variety of the types used and the frequency of their usage. Krashen (1984) theorizes that writing competence derive from large amounts of self-motivated reading for interest or pleasure. It is reading that gives the writer the feeling for the look and texture of a reader-based prose.

2) As the students read and write the processes of comprehending and composing reinforce each other. The findings revealed that students used some cohesive devices from the reading text in their writing. Integrating reading and writing not only better reflects what usually happens in real life situations, especially academic contexts, but also can enrich the quality of written product.

3) Generally the students faced difficulties in writing without listening to the lecture and reading the text. It seems that they have no ideas what to write in the essay and how to organize their writing in a cohesive way. Lack of suitable cohesive ties is also one of the constraints that they have in writing the essay.

4) Integrative writing can help students in writing in a cohesive way. The results suggested that prior reading gives the participants some ideas and information for organizing their essays in more cohesive ways. According to Krashen (1984) reading is the appropriate input for developing writing skills because it is generally assumed that reading passages will somehow function as primary models for writers.

References

Allison, D., Berry, V., & Lewkowicz, J. (1995). Reading-writing connections in E.A.P. classes: a content analysis of written summaries produced under three mediating conditions. *RELC Journal,*

26, 25-43.

Arapooff-cramer, N. (1971). A survey of university writing assignments. *College composition and communication, 22*, 191-168.

Bachman, L. (1990). *Fundamental Consideration in Language Testing*. Oxford:Oxford University Press.

Bernhardt, E. B. (2005). Progress and procrastination in second-language reading. In Mary McGroarty (Ed), *Annual Review of Applied Linguistics* (pp. 133-150). Cambridge: CUP.

Byrne, B. M. (2004). *Structural equation modeling with EQS and EQS/Windows.* Thousand Oaks, CA: Sage Publication.

Canseco, G., & Byrd, P. (1989). Writing requirements in graduate courses in business administration. *TESOL quarterly, 23*(2), 305–316.

Carson, J. (1993). Reading for writing: Cognitive perspectives. In J. Carson and I. Leki (Eds.), *Reading in the composition classroom: Second language perspectives* (pp. 85-104). Boston: Heinle and Heinle Publishers.

Cho, Y. (2003). Assessing writing: Are we bound by only one method? *Assessing Writing, 8*(3), 165-191.

Christensen, F. (1967). *Note toward new rhetoric: Six essays for teachers.* New York: Harper and Row.

Connor, U., & Kramer, M. (1995). Writing from sources: Case studies of graduate students in business management. In D. Belcher & G. Braine (Eds.), *Academic writing in a second language: Essays on research and pedagogy* (pp. 155-182). Norwood, NJ: Ablex Publishing Corporation.

Cooper, C. R. (1983). Procedures for describing written texts. In P. Mosenthal, L. Tamor, & S. Walmsley (Eds.), *Research on writing: Principles and methods* (pp. 287-313). New York: Longman.

Cox, B. (1986). Cohesion and content organization in the narrative and expository writing of children. Unpublished doctoral dissertation, Northwestern University, Evanston, IL.

Cox, B. E., Shanahan, T., & Sulzby, E. (1990). Good and poor elementary readers' use of cohesion in writing. *Reading Research Quarterly, 25*, 47-65.

Crocker, L. (2006). Preparing examinees for test taking: Guidelines for test developers. In Steven M. Downing & Thomas M. Haladyna (Eds.), *Handbook of test development* (pp. 115–130). Mahwah, NJ: Lawrence Erlbaum Association.

Crowhurst, M. (1987). Cohesion in argument and narration at three grade levels. *Research in the Teaching of English, 21*(2), 185-201.

Cumming, A. (1989). Writing expertise and second-language proficiency. *Language Learning, 39,* 81-141.

Cumming, A., Grant, L., Mulcahy-Ernt, P., & Powers, D. E. (2005). *A teacherverification study of speaking and writing prototype tasks for a new TOEFL (No. RR-04-05).* Princeton, NJ:

Educational Testing Service.

Cumming, A., Kantor, R., Powers, D., Santos, T., & Taylor, C. (2000). *TOEFL 2000 Writing framework: A working paper*. Princeton, NJ: Educational Testing Service.

Esmaeili, H. (2002). Integrated reading and writing tasks and ESL students' reading and writing performance in an English language test. *The Canadian Modern Language Review, 58*(4), 599–622.

Fitzgerald, J., & Spiegel, D. L. (1986). Textual cohesion and coherence in children's writing. *Research in the Teaching of English, 20*, 263-280.

Grabe, W. (2001). Reading-writing relations: Theoretical perspectives and instructional practices. In D. Belcher & A. Hirvela (Eds), *Linking Literacies: Perspectives on L2 reading- writing connections* (pp. 15-47). Ann Arbor, Mi: University of Michigan Press.

Hale, G., Taylor, C., Bridgeman, B., Carson, J., Kroll, B., & Kantor, R. (1996). *A study of writing tasks assigned in academic degree programs (TOEFL Research Report No. 54).* Princeton, NJ: Educational Testing Service.

Halliday, M. A. K., & Hassan, R. (1976). *Cohesion in English*. New York: Longman.

Hamp-Lyons, L., & Kroll, B. (1997). *TOEFL 2000--Writing: Composition, community, and assessment (TOEFL Monograph Series Report No. 5*). Princeton, NJ: Educational Testing Service.

Hamp-Lyons, L. (2001). Fourth generation writing assessment. In Tony Silva & Paul Kei Matsuda (Eds.), *On second language writing* (pp. 117–128). Mahwah, NJ: Lawrence Erlbaum Associates.

Hayes, J. R. (1996). A new model of cognition and affect in writing. In C. M Levy & S. Ransdell (Eds.), *The science of writing* (pp. 1-30). Hillsdale, NJ: Erlbaum.

Hillocks, G. (1986). *Research on written composition: New directions for teaching.* Urbana, IL: National Conference on Research in English.

Hunt, K. (1964). *Grammatical structures written at three grade levels* (Research Report No. 3). Urbana, IL: National Council of Teachers of English.

Indrasuta, C. (1987). *A comparison of the written compositions of American and Thai students*. Dissertation.

Jiménez Catalán, R*., &* Moreno Espinosa, S. (*2005). Using Lex30 to measure the L2 productive vocabulary of Spanish primary learners of EFL. *Vigo International Journal of Applied Linguistics, 2,* 27-44.

Kaplan, R. B. (1972). *The anatomy of rhetoric*. Philadelphia: Center for Curriculum Development.

Krashen, S. (1984). *Writing: Research, Theory and Applications.* Beverly Hills: Laredo.

Leki, I. (1993). Reciprocal themes in ESL reading and writing. In J. Carson & I. Leki*, Reading in the composition classroom: Second language prespective* (pp. 9-32). Boston, MA: Heinle and Heinle Publishers.

Leki, I., & Carson, J. (1997) "Completely Different Worlds": EAP and the Writing Experiences of ESL

Students in University Courses. *TESOL Quarterly, 31*(1), 39-70.

Lewkowicz, J. (1997). The integrated testing of a second language. In C. Clapham & D. Corson (Eds.), *Encyclopedia of language and education* (Vol. 7, pp. 121–130). Dordrecht, The Netherland: Kluwer Academic Publishers.

Lumley, T. (2002) Assessment criteria in a large-scale writing test: What do they really mean to the raters? *Language Testing, 19,* 246-276.

Matalene, C. (1985). Contrastive rhetoric: An American writing teacher in China. *College English, 47,* 789-808.

Moore, T., & Morton, J. (1999). Authenticity in the IELTS Academic Module Writing Test: A comparative study of Task 2 items and university assignments. *EA Journal, 2,* 64-106

Neuner, J. L. (1987). Cohesive ties and chains in good and poor freshman essays. *Research in the Teaching of English, 17,* 215-229.

Pecorari, D. (2003). Good and original: Plagiarism and patchwriting in academic second language writing. *Journal of Second Language Writing, 12,* 317-345.

Pennycook, A. (1996). Borrowing others' word: Text, ownership, memory, and plagiarism. *TESOL Quarterly*, *30*(2), 201-230.

Plakans, L. (2009). The role of reading strategies in integrated L2 writing tasks. Unpublished manuscript.

Pritchard, R. J. (1980). A study of the cohesion devices in the good and poor compositions of eleventh graders. Unpublished doctoral dissertation, University of Missouri, Columbia.

Reid, J. (1993). Historical perspectives on reading and writing in the ESL classroom.

Santana, O. (1974). A contrastive study in rhetoric: An analysis of English and Spanish paragraphs written by native speakers of each language (Doctoral dissertation, New York University, 1974). *Dissertation Abstracts International, 35,* 6681A.

Santana-Seda, Sr, O, (1974). an analysis and contrast in the organization of paragraphs written by university students. unpublished PhD thesis, Teachers' College, Columbia University.

Santiago, R. (1968). A contrastive analysis of some rhetorical aspects of writing in Spanish and English of Spanish speaking students in Puerto Rico. Unpublished PhD thesis, Teachers' College, Columbia University.

Shavelson, R. J., & Webb, N. M. (1991). *Generalizability Theory: A Primer*. Thousand Oaks, CA: Sage.

Song, B., & Caruso, I. (1996). Do English and ESL faculty differ in evaluating the essays of native English-speaking and ESL students? *Journal of Second Language Writing, 5*(2), 163-182.

Spack, R. (1988). Initiating ESL students into the academic discourse community. How far should we go? *TESOL Quarterly, 22,* 29-51.

Tierney, R. J., & Shanahan, T. (2001). Research on the reading-writing relationship: Interactions, transactions, and outcomes. In R. Barr, M. L. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research* (Vol. 2, pp. 246-280). New York: Longman.

Weigle, S. C. (2002). *Assessing Writing*. Cambridge: Cambridge University Press.

Weigle, S. C. (2004). Integrating reading and writing in a competency test for non-native speakers of English. *Assessing Writing, 9*, 27-55.

Weigle, S. C. (1994). Effects of training on raters of ESL composiGons. *Language Testing, 11*(2), 197-223.

Weigle, S. C. (1998). Using FACETS to model rater training effects. *Language Testing,* 15(2), 263-287.

Appendix

Protocol Coding Guidelines

From Halliday and Hassan (1976)

Domain-Code	Subdomain	Example
Reference-R	Pronoun Possessive Demonstrative Definite article Comparative	I, he, she, it (include contractions) mine, his, hers, theirs this, that , there the (presupposed in text) same, other, else, as +adjective
Substitution-S (used in place of repeating words)	Nominal Verbal Negative	one, the same do, be, have, do so, do that not
Ellipsis- E (something understood from the text, but not stated) (See #5 below)	Nominal Verbal Clausal	Items omitted, but presupposed in text Often a response to **WH**-?s Yes/no/okay The sky is falling….I know. They ran all day….They were tired. Where should we go? There.
Conjunctive- C (Links T-units and actions, not as part of a list)	Additive Adversative Causal Temporal (indication time passed)	and, nor, or (only when linking) yet, but so, if, then (a cause of something occurring) then, next, soon (external to text)
Lexical- L	Same item Synonym Superordinate Collocation	Baseball bat…baseball bat baseball …ball baseball… sports baseball…bat…base…pitch…hitting plays baseball

1. Do not code first T-unit, unless lexical ties are exophoric (*e.g., the car is exophoric*–not presupposed in text versus *a car*)

2. Ties are coded across T units, not within T-units.

3. Underline and then write the letter for each code above the word(s) coded.

4. Identify sub-domains for reference, conjunction, and lexical ties.

5. A tie is coded as an ellipsis if the omitted phrase can be retrieved from the text (*e.g., The ball went in the lake. The dog <u>went</u> [to the lake] to go get it.*