



## **Exploring Source Use, Discourse Features and Their Relation to Proficiency in Source-based Writing Assessment in a Turkish EAP Context**

*Ayla Yalçın Duman*

*Ozyegin University, Turkey  
ayla.duman@ozyegin.edu.tr*

*Aslı Lidice Göktürk Sağlam*

*Ozyegin University, Turkey  
asli.saglam@ozyegin.edu.tr*

### **APA Citation:**

Yalçın Duman, A. & Göktürk Sağlam, A.T, L. (2020). Exploring source use, discourse features and their relation to proficiency in source-based writing assessment in a Turkish EAP context. *Journal of Narrative and Language Studies*, 8(14), 112-129.

### **Abstract**

Source-based writing, using content from reading texts into writing, constitutes a prominent aspect of academic writing. Both research and classroom practice have demonstrated that effective use of sources poses challenges for undergraduate students in second language (L2) writing instruction. In acknowledgement of these challenges in writing from sources, this study aims to explore discourse features of writing in an integrated writing exam conducted in a Turkish university context to fulfil a university examination requirement for EFL learners. Having taken a credit bearing English for Academic Purposes (EAP) writing course, students completed the source-based writing assessment task, which requires them to compose an argumentative essay by integrating relevant information from the given texts. Twenty essays were graded and categorized into 3 levels of proficiency. The essays were analysed in terms of discourse features including lexical sophistication, fluency, source use (amount and type of source borrowing) and meaning construction (appropriateness). The Kruskal-Wallis test was conducted to determine the relation between proficiency levels and discourse features of students' writing. A significant difference was found regarding the relation between proficiency and appropriacy of source-use across levels. The study has implications for pedagogy to enhance academic literacy and citation practices and source use of L2 university students as well as for integrated writing assessment.

**Keywords:** reading-to-writing assessment, textual borrowing, source-based writing, proficiency, discourse features, fluency, appropriateness, lexical sophistication

### **Introduction**

Source-based writing prompts students to summarise, paraphrase and synthesize source-based information effectively into their writing. It engages student writers in several interconnected complex writing and reading processes as they engage with reading texts and construct their writing (Spivey, 1990). Using information from sources through citation is considered “more

than providing a name and a date; it is a subjective process of deciding how to make meaning out of the available resources” (Shi, 2010, p.21). In order to achieve success in academic writing, which is contextualised as a complex academic literacy (Pecorari & Petric, 2014), comprehension of source materials in depth (Wette, 2010), understanding particular demands of task types (Pecorari, 2003), mastery of “linguistic and authorial intertextual manipulations” (Thompson, Morton & Storch, 2013, p.99), and acknowledgment of the mechanics of referencing (Thompson, 2005) are highlighted. Improving ability to write from sources demands students to master “processes that involve reading, understanding, learning, relating, planning, writing, revising, editing, and orchestrating” (Campbell, 1990, p.211). Source-based information should be re-contextualised and re-shaped to fit one’s own propositions instead of simply reporting and reproducing borrowed information (McCulloch, 2012). However, adding one’s own perspective and developing academic authorship are challenging and complex academic literacy skills which require sustained engagement for novice writers (Thompson et al, 2013; Shi, 2010, Wette, 2018).

Studies to date have reported a range of challenges inexperienced/novice undergraduate writers encounter in terms of proficiency in academic English and task requirements (Keck, 2014; Thompson, Morton, & Storch, 2013; Shi, 2004; Wette, 2017). Novice L2 writers’ use of sources in writing is often characterised by too much deference to their sources, failure to take an evaluative stance to the ideas expressed in their sources and lack of developing sufficient authorial ownership (Pecorari, 2003; Petric, 2007; Thompson, 2005; Thompson et.al. 2013). In acknowledgement of these challenges in our institution we offer our L2 Turkish undergraduate students, from various disciplines of study, support and instruction in English for Academic Purposes (EAP) with a specific focus on writing using sources. The writing course in the EAP program focuses on reading/writing and academic literacy skills. Since source-based writing is a challenging academic skill for L2 learners, our course sets modest expectations and provides instructional input over a semester. The course is structured in such a way to ensure development of source use gradually that all the class readings center upon two main themes so students read academic articles on different aspects of sustainability and business ethics, and discuss them in the class along with the input and practice on the conventions of citing from sources. In completion of the course, students are required to take a source-based writing assessment task where they bring their class articles to the exam for source use. Going over the exam papers, as teachers we observed that even if students selected relevant information, they had difficulty integrating authors’ ideas of their sources into their own argumentation. Based on text analysis of the student writings produced under exam conditions at the end of the EAP course, this study aims to explore the role of proficiency on L2 undergraduate students’ writing performance in terms of source use, fluency and lexical sophistication.

## **Literature Review**

Studies of source-based writing assessment have sought to identify composing processes (Ascención, 2008; Esmaili, 2002; Plakans, 2008, 2009), discourse features of the written products, amount and kind of textual borrowing (Weigle & Parker, 2012; Weigle, 2002, 2004), effect of instruction (Thompson, Morton & Storch, 2013; Zhang, 2017), effect of source-texts on writers (Plakans & Gebriel, 2012, 2013), rater effects on test score variability (Shin & Ewert, 2015). By comparing writer processes across tasks, examining composing strategies in integrated tasks, analysing features of written outcomes, and relating source-based writing to instruction and rater effects, these studies have contributed to understanding the underlying constructs of source-based writing assessment tasks for second language (L2) writing.

Additionally, studies have explored other aspects of source based writing including source selection (Thompson, Morton & Storch, 2013), the rhetorical purposes for which citations are

used (Mansourizadeh & Ahmad, 2011; McCulloch, 2012; Petric, 2007; Shi, 2010; Wette, 2017) and the development of stance/voice (Hyland, 2005; T. Hyland, 2009). Source use in integrated tasks is perceived as complex and multi-faceted due to amount, type and integration style of textual borrowing (Grabe, 2003), as well as conceptual appropriateness, and meaningful use of source-based information in writers' own text (Cumming et al., 2005). Therefore, writing using sources posits various challenges for L2 students.

Studies to date have revealed that inexperienced writers face difficulty in signalling their stance towards readers and their sources (Lee et al., 2018; Wette, 2017, 2018), adding sufficient authorial input into their writing (Thompson et. al, 2013; Wette 2018), using sources within a limited scope of rhetorical functions, mostly reduced to attribution (Hirvela & Du, 2013; Mansourizadeh & Ahmad, 2011; McCulloch, 2012). In stark contrast, experienced writers employ citations strategically to fulfil a variety of purposes such as supporting and justifying their own claims (Mansourizadeh & Ahmad, 2011; Pertic & Harwood 2013).

Consequently, citation practices in source-based writing produced by novice writers is framed as "a collection of others' views" (McCulloch, 2012, p.57) and knowledge display (Petric', 2007) instead of representation of one's own ideas in relation to the views of the authors of the sources that they use. Progression of a novice writer towards being an experienced one is associated with Bereiter & Scardamalia's (1987) knowledge-telling and knowledge transformation modes of writing (Hirvela & Du, 2013; Lee et. al, 2018; Petric', 2007; Wette, 2017, 2018). Inexperienced writers rely on knowledge-telling strategy by reporting what other authors stated through extensive use of attribution citations whereas experienced writers can make use of knowledge transformation through identifying associations among information from different sources, and relate these to their own stance and propositions to build their own argument. According to Wette (2018), interacting with the ideas of the authors of source texts, expressing a particular stance, and considering expectations and interpretations of the reader, inexperienced writers at the "knowledge telling" stage are likely to fall back on inexpert practices such as "patchwriting" or paraphrasing from only small portions of a text, a practice that Howard, Serviss, and Rodrigue (2010, p.187) describe as "writing from sentences selected from sources" (p.62). Similarly, in their qualitative study exploring perceptions of 12 undergraduate L2 learners towards citation practices in academic writing Stockall and Cole (2016) concluded that inexperienced writers regarded the use of information from sources as a superficial (cosmetic) compensatory writing strategy and relied on extensive referencing as a means of fulfilling task demands and teacher directives. Researchers concurred novices lacked awareness regarding how to use citations correctly and perceived them as cosmetic and, therefore, used a "dumping strategy" (p.349) to drop citations randomly in their text to comply with the requirement of their teachers.

However, empirical evidence for the appropriate source use among EAP students is quite limited. While Weigle and Parker (2012) were examining the relation between pattern of textual borrowing and proficiency in their study, they acknowledged not distinguishing between appropriate and inappropriate borrowing as a limitation. This study is an attempt to document whether there is an association between (in)appropriate textual borrowing and proficiency. Contextual appropriacy of source use posits an important dimension in academic writing since it shapes authoring practices of university students. Thus, the findings of the study would contribute to the growing literature regarding appropriate use of sources in context.

### *Source Use and Proficiency*

Several studies have maintained that source use is affected by proficiency (Cumming et.al., 2005, Gebril & Plakans, 2009, 2012) and concluded that higher proficiency students made use of more combinations of idea-units from sources whereas lower proficiency ones tended to have

more verbatim source-use. Shi (2010) investigated textual borrowing practices of 16 undergraduate writers (3 L1 writers and 13 L2 writers). The students were asked to examine the types of textual borrowing they had employed in various instances of source text use in their research papers and justify their citation decisions. An important finding relative to this study was that student writers' level of confidence in their ability to express the information from sources in their own words determined their choice between using a direct quotation and a paraphrase.

Although recent research (Plakans & Gebril, 2017) examined proficiency the interface between discourse synthesis with a focus on organisational patterns and cohesive devices, the associations between proficiency and appropriacy in L2 students warrants further research. Cumming et al. (2005) reported that writers with high proficiency fall back on summarization and mid-range writers prefer paraphrasing and verbatim use whereas low proficiency writers are inclined to make use of source texts at the minimal level. The authors claimed that differences were grounded in writers' different levels of comprehension of the source-texts. Findings of their study suggested that percentage of source use without acknowledgement decreases as proficiency increases. These findings resonate with John and Mayes (1990) who also found that English L2 university students with low-proficiency level copied information from the source text more repeatedly than the writers with high-proficiency. While the lower proficiency writers had a tendency for direct copying, the high proficiency writers were observed to utilize more combinations of source-based idea units.

Source use of L2 students and its impact on their writing performances have been explored heavily in L2 writing assessment. However, the relation between proficiency and appropriacy has been identified as an under-researched topic in L2 writing assessment (Plakans & Gebril, 2013). Consideration of whether borrowed information fits the student-writer's flow of argument and context can offer insights into how students with different language proficiency levels evaluate and integrate sources into their writing. Therefore, our research mainly focused on exploring the association between the writers' scores on a source-based integrated writing task and discourse features of the written outcomes with a special focus on appropriacy.

### **Research Questions**

1. How do the students make use of textual borrowing in their writing?
2. How does Turkish speakers' English writing proficiency relate to the discourse features in their source based reading-to-write assessment tasks?
  - a. Does source use differ across proficiency levels?
  - b. Does vocabulary richness differ across proficiency levels?
  - c. Does fluency differ across proficiency levels?
  - d. Does appropriacy differ across proficiency level?

### **Methods**

#### *Participants*

This study is carried out at a Turkish University with undergraduate Turkish native speakers who have sufficient proficiency levels to study in English. This group included freshman students who have fulfilled the English language entry requirement to study at the university (obtained a minimum grade of 65 on the institutional proficiency test or a mean average TOEFL iBT score of 80). The participants were enrolled in a 16-weeks long undergraduate English course with 4 contact hours each week which aimed to improve students' academic skills, cognitive skills and linguistic skills at an EAP university program by using 'sustainability' and 'business ethics' themes as content. Thus, the course adopted an integrated approach and employed a reading-to-write summative assessment task. The course objectives aim to address academic reading (i.e. identifying main and supporting arguments) and writing skills. The scope

of the course objectives covered conventions of academic writing (e.g. citation, referencing, paraphrasing, and summarizing) in the form of argumentation. Argumentative essay writing (via papers and exercises) often focused on organizing, achieving cohesion in writing, developing written argumentation and expanding main ideas and premises by using the source information conveyed through course content (articles read in the class) throughout the course to help students improve their ability to integrate source information into their own writing effectively. Consequently, upon the completion of the course, the students were required to take an open-book exam which allowed them to bring in the articles that had been analysed in class previously as well as their reading notes to compose an academic essay of about 750 words in 120 minutes. The reading texts of the course entailed abridged versions of authentic academic and newspaper articles as well as excerpts from books.

Twenty student papers were used in the study. The students were from various discipline areas such as hotel management, civil engineering and architecture. Exam performance of the participants were not pre-selected depending on the range of scores, as they had not yet taken the end-of course integrated writing assessment task. After they wrote, twenty essays were chosen randomly.

#### *Data Collection*

*The integrated writing assessment task.* The task for the study is the assessed task of Undergraduate Academic English Program (UAEP) in the research context. Replicating some characteristics of authentic academic writing, test-takers are required to respond to an argumentative writing question and compose their response by using information from several reading passages on the topic of sustainability. Authentic reading texts from academic articles and newspapers present opposing points of view. As summarised in Table 1 below basic readability measures were also used to ensure similar difficulty. These reading texts were used as the sources of all citations in student writing and teachers worked on text comprehension activities during instruction in class prior to the test. The test-takers could bring their articles w/without margin notes to this open-book writing assessment.

Table 1. Descriptive data of the reading texts used as sources

	Flesch-Kincaid Grade Level	Flesch Reading Ease	Words	Sentences	Words per sentence	Characters per word
Text 1	12	15.4	1725	73	22.8	5.7
Text 2	12	37.6	3373	116	28	5
Text 3	11	47.2	1855	111	16.3	5
Text 4	12	27.9	1063	41	24.4	5.3
Text 5	12	36.3	831	34	23.9	5
Text 6	11	54.3	1233	66	18.6	4.7

Additionally, the faculty members of UAEP modified these texts for readability and difficulty. The integrated task and the scoring rubric were piloted with 65 undergraduate students.

The genre of this integrated task was argumentative and test-takers were allowed to use the previously exploited reading sources while composing their response. As mentioned before the reading texts also adopted argumentative stances towards the topic, sustainability. To illustrate

when one text argued consumerism is an impediment to sustainability, the other claimed consumerism contributes to sustainability. Names of the authors, publication date and other essential information were provided in to guide the students in terms of citation of these sources.

The integrated writing assessment task was designed to trigger multiple skills and the ability to use information from sources to build one's own writing in 120 minutes. A sample instruction reads as: 'Answer the writing question below: A major change in the current consumerist lifestyle is an urgent necessity for the sustainability of the world. Do you agree or disagree? Write an argumentative essay of 750+ words with reference to the texts covered in class. When referring to the texts, use proper APA style of in-text citation (direct quotation [maximum 3] and paraphrasing [minimum 1])'.

The test-takers are required to select ideas to be used in their writing from a variety of reading sources that had been read and discussed in the class previously and connect these with their own point of view(s) to build their argument. Although comparison of information and synthesizing ideas from multiple texts to form an argument through writing is a commonly assigned task in academic settings, it's often deemed as 'challenging' especially for L2 writers (e.g. McCulloch, 2012, Thompson, 2013; Petric, 2007). Since the task provided exposure to texts before students take the exam, the source texts were assumed to have a positive impact upon learners by modelling organization and appropriate language (grammar and selection of vocabulary) and generating ideas.

Twenty essays that were produced under exam conditions are used as student written samples. Essays are numbered and this number coding is used throughout the research study in order to secure identity of the participants. Scoring process and proficiency levels are discussed in detail under data analysis.

*Data Analysis.* In order to answer the two research questions, the essays were analysed qualitatively and quantitatively. Essays were analysed with respect to discourse features and source use and compared across proficiency levels. These steps will be explained in a more detailed way in this section.

#### *Scoring of Essays*

The essays were scored by using a six-level holistic scale that is devised by Plakans and Gebril, (2017) based on TOEFL IBT integrated writing scale. This empirically validated rating scale is used because the integrated writing assessment task used in the present study is based on a similar operationalisation of the writing construct that is used in TOEFL IBT tasks. Rating scale entails band descriptors that are intended for the evaluation of different dimensions of source-based writing including content, organization, accurate and effective use of source(s) and language errors. Two experienced English language instructors (the researchers) scored the essays. Before scoring, each instructor analysed the rating scale and rated a few essays to discuss discriminating features of certain proficiency levels indicated by the rubrics. Subsequently, the remaining essays were rated independently by both raters. They had an interrater reliability coefficient of  $r = 0.92$  (Cohen's Kappa). Discrepancies in ratings (i.e. when scores differed by more than one band score) were resolved in further discussions. Due to insufficient number of observations across scores we decided to distribute the writers into three proficiency levels based on the holistic rubric: Scores 1 and 2 were compounded and used as Level 1, 3 was utilized as Level 2, and scores 4 and 5 were aggregated and used as Level 3.

**Table 2. Writing Scores and Proficiency Levels**

	Scores	Number of Participants
Level 1	1-2	4
Level 2	3	6

Level 3	4-5	10
---------	-----	----

*Discourse Features.* The essays were analysed and coded based on certain discourse features including source use (amount of source use and integration style), appropriacy, lexical sophistication and fluency. The writers' integration styles were categorised as direct citation (quotations), indirect citation (paraphrases of source-based information), verbatim source use (source use without acknowledgement), accuracy of citations (according to the technical citation conventions and representation of source text writer's ideas) and appropriateness of the students' citation (contextually) as seen in Table 4. The textual borrowing styles were examined, tallied and coded on actual writing samples.

Table 3. Categories for using source use patterns

Category	Description
Direct citation	The writer uses exact words/sentences from sources with quotation marks by acknowledging the writer(s) of sources.
Indirect Citation	The writer paraphrases source based ideas by acknowledging the writer(s) of sources. The writer explains source based ideas by acknowledging the writer(s) of sources. The writer summarizes source based ideas by acknowledging the writer(s) of sources.
Verbatim Use	The writer plagiarizes.
Accuracy of citations	The writer uses accurate forms of attribution and referencing. The writer represents source text writer's ideas accurately without distorting the meaning of source-based ideas/information
Appropriacy	The writer selects and connects relevant content from source texts to her/his view point and use this text-based information strategically to build own argument.

In order to determine the source use in written products two raters separately distinguished the idea units in each essay. Then, the raters individually marked source-based ideas that were used as a quotation, paraphrase or source use without acknowledgement in the units that were taken from the source texts. Afterwards, we determined the source use of each writer in percentages by dividing the total number of idea units by the number of idea units that came from the source texts (Plakans, 2009).

In this study, appropriacy refers to strategic use of source-based information in order to support, develop, justify, and/or refute students' own propositions. It entails relevance of source-based information to the opinion(s) of the students and logical connection of ideas. This requires the students to critically analyse and comprehend external texts, select information that align with the scope of their writing assessment task, present their own ideas in relation to the source-based information manifested by the writers of the text that they use. In the example of inappropriate source-use given in Table 5 below, the student-writer's selection of citation focuses on the cause of environmental issues being humans, whereas the prior idea outlined focuses on overconsumption and advertising which accelerates it. Thus, the citation proves to be unconnected and irrelevant to the idea that the student is trying to justify.

The raters individually analysed whether textual borrowing in the essays fit within the flow of written ideas. When source-based ideas were irrelevant to the arguments of the writer, they

were considered as inappropriate source use. Use of source-based ideas were considered appropriate when writers were able to select and connect relevant content from source texts to their view point and use this text-based information strategically to develop their own stance.

Table 4. Examples of appropriate and inappropriate source use

Source Use	Examples from essays
Appropriate	The society we live in changes from sustainable society to consumer one. In order to keep up this transformation, people has to sacrifices somethings. As Cahill (2001) illustrates that “the growing consumption of material and experiential commodities adversely affects familial and social ties”. In order to satisfy the desire of consumption, people has to work more; therefore, the amount and the quality of time that they spend with their families and social environment decreases. Individuals have less tolerance to each other and divorce rates go up, they couldn’t find time to build a family and the birth rates go down.
Inappropriate	Initially, the current economic system based on consumerist life style and advertising is the biggest threat for sustainability because advertising supports consumerism. It leads to addicted behaviours and overconsumption. People consume fast and they cannot control themselves. Advertisements support people for consuming. Diamond (2005) asserts that “Because we are the cause of our environmental problems, we are the ones in control of them, and we can choose or not choose to stop causing them and start solving them” (p.5). It can be said that people advertise their products for purchasing but they cannot control them. Therefore, they generate addicted people and it leads to collapse.

Then, we compared our evaluation of contextually (ir)relevant source use in the essays and determined (in)appropriate source use in percentages.

Lexical sophistication is determined by the division of the total number of characters by the word total in each essay. For this study, we used the Readability Index Flesch-Kincaid Reading Ease and Grade Level provided by Word to determine the average word length. Fluency is calculated based on the total number of words per essay.

The coding provided the following dependent variables which were used in the analysis across proficiency levels: (1) lexical sophistication (average word length), (2) fluency (total number of words), (3) direct source use (quotations), (4) indirect source use, (5) verbatim source use, (6) total percentage of source use, (7) accuracy, and (8) appropriacy. Using the scores and results of feature coding, the non-parametric Kruscall Wallis test was used to consider relationship of discourse features to different proficiency levels.

## Results

While data analysis entailed both qualitative and quantitative measures, the results are combined to explore research questions which focus on: (1) use of textual borrowing in the integrated writing task, and (2) the association between proficiency and discourse features (source use, appropriacy, fluency and lexical sophistication).

### Source Use

When we analysed their written performance, we observed that the majority of the writers (67%) used incorrect APA citation when they integrated source-based ideas into their writing.



Analysis of the essays also revealed that indirect citation was used more by the proficient writers at level 3 (54%) and level 2 (46%) than direct citation (quotations) as a means of textual borrowing whereas the low proficiency writers tended to utilize quotations (42%) and verbatim source use (31%) more.

Table 5. Analysis of essays based on source use at each score level

	Indirect		Direct		Verbatim	
	f	%	f	%	f	%
Level 3	28	54	18	35	6	12
Level 2	18	46	15	39	6	15
Level 1	5	26	8	42	6	31
Total	51	46	41	37	18	16

The overall analysis of the results indicated that most of the textual borrowing was contextually appropriate (74%). However, as can be seen in Table 12 below, we marked a difference across levels since appropriacy of borrowed ideas descended from high proficiency (94% at level 3 and 74% at level 2) to low proficiency writers. This finding is also confirmed in further statistical analysis which is explained in the next section.

Table 6. Analysis of essays based on appropriacy of citations in context at each score level

	Appropriate source use		Inappropriate source use	
	f	%	f	%
Level 3	49	94	3	6
Level 2	29	74	10	26
Level 1	3	16	16	84
Total	81	74	29	26

#### *Relation Between Proficiency and Discourse Features*

Although the writers across levels produced essays with differing fluency (Level 1 M=587,4, Level 2 M=621,5 and Level 3 M=699,3) and lexical sophistication (Level 1 M= 5,16, Level 2 M=4,97 and Level 3 M=5,14), these differences were not statistically significant with regard to the relation between proficiency and fluency and proficiency and lexical sophistication. As seen in Table 13, the Kruskal Wallis test yielded statistical significance only between proficiency and appropriacy ( $H(2)= 8.07, p=0.01$ ) across levels (Level 1: M=05.30, SE= 11.4, Level 2: M=10.75, SE= 10.4, Level 3: M= 14, SE= 8.09).

Table 7. Kruskal-Wallis results for discourse features

	Overall Source Use	Direct Citation	Indirect Citation	Verbatim	Lexical Sophistication	Fluency	Appropriacy
Chi-Square	1,205	,825	4,056	2,017	1,802	1,722	8,071
df	2	2	2	2	2	2	2
Asymp. Sig.	,55	,66	,13	,37	,41	,42	,018

a. Kruskal Wallis Test  
b. Grouping Variable: Proficiency

The score level comparisons of in context use of source-based ideas in the student essays, summarised in Table 14, also demonstrate that more proficient writers have a greater command of integrating information across sources textually appropriately into their own writing (95%) in comparison to less proficient writers (Level 1, 35% and Level 2, 78 %). The findings remark that proficiency of a writer impacts the quality of source integration.

Table 8. Use of sources appropriately across levels

Appropriacy	Percentages at each score level		
	Level 1	Level 2	Level 3
Textual borrowing used in context appropriately	35	78	95

Mann-Whitney U test was used for post-hoc comparisons after Kruskal Wallis. Data analysis revealed a significant relationship between Level 1 and Level 2 ( $U=1$ ,  $p=0.017$ , two tailed) and Level 1 and Level 3 ( $U < 1$ ,  $p=0.002$ ). However, there was an insignificant relationship between Level 2 and 3 ( $U=19$ ,  $p=0.15$ ) which may indicate that the association between Level 2 and Level 3 dissolves once writers reach Level 2 proficiency. The relationship between appropriacy and proficiency can be observed in the figure below.

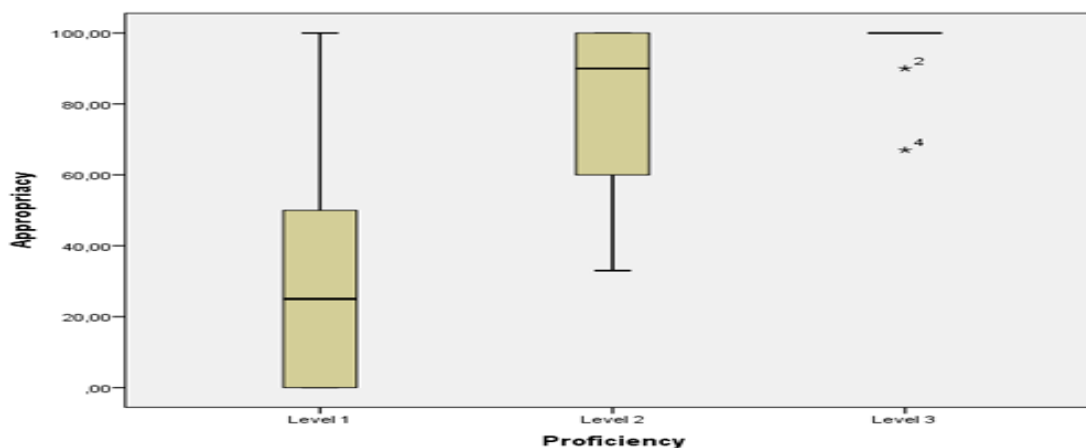


Figure 1. The association between appropriacy and proficiency across levels

## Discussion

The results of the study suggest that textual appropriateness of source-use showed variety between performances of writers at different proficiency levels, whereas other discourse features including lexical sophistication, fluency, and source use did not. These results will be explained further in this section and the implications of source-based writing tasks will be outlined. However, it is necessary to acknowledge our limitations here. More differences might have been revealed across different proficiency levels if a larger sample size was used to ensure variation across proficiency levels. The trustworthiness of students' self-reports of their proficiency level in the questionnaire is a point of concern for us. To resolve this uncertainty, an independent measure of language proficiency could be used to differentiate between the proficiency levels. Also, fluency is treated separately as a feature of language and in further studies it can be handled together with linguistic features of complexity and accuracy since their interaction has an impact of integrated writing performances.

### Discourse Features and Proficiency

This study examined several discourse features to determine whether these relate to proficiency across different levels. Across the three proficiency levels used in this study, the results indicated a statistical significance only between appropriacy and proficiency. The analysis of other

discourse features such as vocabulary richness, fluency, and source use did not reveal significant differences despite the positive trends observed at performance of writers with high proficiency.

#### *Lexical Sophistication*

With regard to lexical sophistication, this finding is in agreement with the study of Gebril and Plakans (2009, 2013) who concluded that there was no statistical significance between lexical sophistication and proficiency. This conclusion was attributed to the similar means in vocabulary richness across different proficiency groups. In addition, given that the lower-level writers were inclined to use direct quotations more in comparison to higher-level writers, the borrowing of various vocabulary items in the original text by the lower-level writers may have made the vocabulary use in their response more sophisticated. Also, following the above mentioned studies, the measure of lexical sophistication utilized in this study consists of average word length, a measure which does not consider lexical accuracy and its impact on writing quality.

#### *Source Use*

As for the source use, our finding contrasts previous research studies which concurred that writers with higher proficiency levels utilized textual borrowing more in comparison to low-proficiency writers (Cumming et al., 2005; Currie, 1998; Gebril & Plakans, 2009, 2013). The integrated task used in this study required test-takers to integrate source-based information by giving them firm directions, instructions and clear expectations. Thus, task specifications, which lead students across all proficiency levels towards academic borrowing, may have impacted the relation between source-use and proficiency.

Previous research (Kirkland & Saunders, 1991; Pennycook, 1996) has concluded that students coming from test-oriented educational cultures that are prone to rote learning tend to utilize textual borrowing without correct use of citation. In this respect finding of this study may confirm their results because we observed that most students did not know how to cite accurately according to citing conventions (i.e. providing a date and page number when necessary). However, in terms of textual appropriacy, the high proficient students displayed a good grasp of selecting, organizing and integrating source-based information to bolster their own ideas.

#### *Fluency*

The insignificant statistical relation between fluency and proficiency revealed by the data analysis in this study differs from the findings of previous studies (Cumming et al., 2005; Gebril & Plakans, 2009; Gebril & Plakans, 2013) which reported large effect sizes and a strong relationship between proficiency and fluency. There could be several explanations for the finding obtained in this study. In the above mentioned studies, sample size comprised over 130 participants and the small sample size of the present study may have caused the disagreement. Additionally, researchers argue that fluency should be considered with accuracy and complexity with regards to their relationship with each other, rather than being treated as a separate feature of language (Plakans, Gebril & Bilki, 2019). In our study, we did not coalesce accuracy, complexity and fluency measures. In addition, the instructions in the task led the students towards textual borrowing from external sources. Consequently, the writers across different proficiency levels may have aimed to fulfil the task requirement in terms of word limit and citing from sources, using academic borrowing as a means of academic survival.

#### *Appropriacy and Proficiency*

The findings demonstrate that writers' appropriate use of source-based information can be inferred from their integrated reading to writing task scores. In other words, appropriate integration of source-based information is associated with higher proficiency. Integrated writing assessment tasks prompt academic writing skills including selecting information from sources,

and integrating sources appropriately into academic writing. Prior research base has confirmed that integrated writing tasks elicit sub processes of discourse synthesis; organizing and connecting (Plakans, 2009; Plakans & Gebril, 2017; Yang, 2009). Our study attempted to relate textual appropriateness of source-use, which is associated with these sub processes, to test-takers' writing performance. The findings revealed that there is a connection between these skills and the scores of writers with different levels of proficiency. Consequently, this evidence confirms the validity of the integrated writing assessment tasks (Leki & Carson, 1994, 1997; Plakans & Gebril, 2013) which elicit such a discourse synthesis process.

### **Implications**

The findings of the study reveal how students utilize external reading texts in an EAP testing situation and bring about several implications for instruction and assessment. The study provides insights into teaching for the local testing context because the findings remark the necessity of more textual analysis and language support as well as remedial teaching on not only mechanical aspects of referencing but also on different purposes of citation. These findings resonate with outcomes of previous research studies and suggest that more attention should be given to source and citation use in EAP courses. Lee et. al. (2018) suggest that rather than reducing citation practices to technical exercises by focusing on mechanics of citations, instruction should entail “the diversity of rhetorical roles citations play and meanings they express in composing persuasively sophisticated academic texts” (p.11). Similarly, as indicated by Hirvela and Du (2013), when teachers teach citation techniques as a means for avoiding plagiarism, then knowledge transformation function of such citation practices are thwarted at this sophisticated, analytical and deeper level. Thus, rather than placing emphasis on mechanical exercises of source use, instruction may focus on raising students' awareness to authentic use of rhetorical purposes citations are used for in academic writing to empower writers in gaining proficiency to use source-based information strategically to build their own arguments and establish greater level of authorial ownership.

Secondly, the findings reveal useful information in terms of the interplay between proficiency, discourse features and use of sources. The findings add to the accumulating literature regarding the relation between proficiency and appropriacy in the integrated writing tasks; an area that warrants further research attention (Cumming et al., 2016, Plakans 2012, 2013). The results obtained in the present study indicate that the writers' ability to organize, select and connect source-based information can be inferred from their test scores. Proficiency has an impact on using source ideas appropriately in context. Thus, during course design and instruction more guidance in reading comprehension and textual analysis and language support should be provided.

Textual appropriacy, which involves organizing and connecting source-based-information, is associated with proficiency. In this specific task, the test-takers were required to refer to external sources by making use of direct and indirect citation and almost all test takers made use of direct and indirect citation. However, appropriacy of their source use determined their score. Therefore, for more reliable and valid scoring appropriate rubrics should be developed for the integrated tasks. More fine-grained descriptors, such as accurate representation, correct contextual use of the borrowed information and accurate use of referencing, could be integrated into rubrics to evaluate written performances.

As teachers and researchers, we observed that although all our students were inexperienced writers, performances varied in terms of establishing connections between source materials and one's own writing. The findings imply that these differences may have stemmed from their varying proficiency level. Consequently, proficiency for L2 learners plays a significant role in enhancing their confidence in source-based writing. Researchers suggest continuous instruction and engagement in order to improve this sophisticated aspect of academic writing (Thompson,

Morton and Storch, 2013). In addition to these suggestions, since proficiency affects scores, instructional activities to improve proficiency should also be embedded into the curriculum of academic writing courses of EAP programs.

## **Conclusion**

This study contributes to the existing literature in integrated writing assessment by exploring source use in L2 EAP students' essays as well as examining the interface between discourse features and proficiency. Our method of analysis distinguished between appropriate and inappropriate borrowing of source-based information. Consequently, we have found that appropriate textual borrowing leads to higher essay scores. It is important to note that in this study the test-takers were required to use information from the long academic texts, and the writers were familiar with the sources. Further research may investigate how comprehension impacts source use when test-takers are exposed to the sources for the first time. Moreover, the integrated task had a firm direction and instructions for the writers indicating clear expectations of their essays (i.e. When referring to the texts, use proper APA style of in-text citation (direct quotation [maximum 3] and paraphrasing [minimum 1])). However, the impact of task instructions on source use was not within the scope of the present study and this may be addressed in further research.

Within the scope of this study, the integrated writing assessment task entailed long academic texts and the student writers were given the sources and engaged in text comprehension during classroom instruction before the task. Further research may investigate how reading comprehension impacts source use when test-takers are exposed to the sources for the first time under test conditions. Also, the integrated task had a firm direction and instructions for the writers indicating clear expectations of their essays (i.e. When referring to the texts, use proper APA style of in-text citation (direct quotation [maximum 3] and paraphrasing [minimum 1])). However, the impact of task instructions on source use was not within the scope of the present study and this may be addressed in further research. Proficiency should not only be confined to language skills in EAP programs since progression of academic literacy skills such as acknowledging various rhetorical purposes for textual borrowing and recognizing ways for establishing authorial identity have been considered equally important in describing the role of source use in academic writing development. Therefore, further research may investigate how proficiency relates to various purposes of citations in diverse disciplinary areas.

APPENDIX 1

Holistic scoring rubric

Score	Task description
5	<p>An essay at this level:</p> <ul style="list-style-type: none"> <li>· Successfully addresses the assignment through the use of a clear argumentative essay organizational pattern</li> <li>· Writer’s own stance is clear</li> <li>· The arguments further develop and support the writer’s stance by different types of convincing evidence</li> <li>· Refutation presents the opposing view by pointing out its weaknesses</li> <li>· Successfully presents relevant information from source texts in support of writer’s arguments</li> <li>· Is well organized with well-developed content</li> <li>· Occasional language errors that are present do not result in inaccurate or imprecise presentation of content or connections</li> </ul>
4	<p>An essay at this level:</p> <ul style="list-style-type: none"> <li>· Adequately addresses the assignment through the use of a clear argumentative essay organizational pattern</li> <li>· Writer’s own stance is adequately clear</li> <li>· The arguments adequately develop and support the writer’s stance by different types of convincing evidence</li> <li>· Refutation adequately presents the opposing view by pointing out its weaknesses</li> <li>· Adequately presents relevant information from source texts in support of writer’s arguments</li> <li>· Is generally good in coherently and accurately presenting relevant information from source texts, although the essay may have</li> <li>· information not (correctly) referenced</li> <li>· Has clear organization and logical development</li> <li>· Contains more frequent or noticeable minor language errors that do not result in anything more than an occasional lapse of clarity</li> <li>· or in the connection of ideas</li> </ul>
3	<p>An essay at this level:</p> <ul style="list-style-type: none"> <li>· Largely addresses the assignment, argumentative organizational pattern is present but may need reader effort to identify</li> <li>· Writer’s own stance is somewhat clear</li> <li>· The arguments adequately develop and support the writer’s stance by somewhat convincing evidence</li> <li>· Presents somewhat relevant information from source texts in support of the writer’s arguments</li> <li>· Refutation somewhat presents the opposing view by pointing out its weaknesses</li> <li>· Occasionally lacks cohesion but has a basic organizational structure and development</li> <li>· Includes many usage and grammar errors that may result in noticeably vague expressions or obscured meanings</li> </ul>

2	<ul style="list-style-type: none"> <li>· An essay at this level:</li> <li>· Partially addresses the assignment; only parts of argumentative organizational pattern are present</li> <li>· Writer’s own stance is weak</li> <li>· The arguments fail to develop and support the writer’s stance by insignificant or irrelevant evidence</li> <li>· Contains some relevant information from the readings, but is marked by significant inaccuracy of important ideas from</li> <li>· the readings or largely copied texts</li> <li>· Refutation is weak and fails to present the opposing view by pointing out its weaknesses</li> <li>· Lacks logical organizational coherence and development</li> <li>· Contains <b>language</b> errors or expressions that largely obscure connections or meaning at key junctures, or that would likely obscure understanding of key ideas</li> </ul>
1	<p>An essay at this level:</p> <ul style="list-style-type: none"> <li>· Addresses the assignment to a very limited degree; argumentative pattern is not evident</li> <li>· Writer’s stance is not clear and not supported or developed</li> <li>· Provides little or no meaningful or relevant coherent content from the readings and does not develop content</li> <li>· No refutation of opposing arguments or fails to refute relevant counter-arguments</li> <li>· Most language in the writing is copied or includes language that is so low it is difficult to derive meaning</li> </ul>
0	<p>An essay at this level:</p> <ul style="list-style-type: none"> <li>· Either merely copies sentences from the reading, rejects the topic, not connected to the topic, is written in a foreign language, or is blank</li> </ul>

## References

- Ascención-Delaney, Y. (2008). Investigating the reading-to-write construct. *Journal of English for Academic Purposes*, 7, 140–150.
- Bereiter, C., & Scardamalia, M. (1987). *The psychology of written composition*. Hillsdale, NJ: Erlbaum.
- Campbell, C. (1990). Writing with others’ word: using background reading text in academic compositions. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 211–230). Cambridge: Cambridge University Press.
- Cumming, A., Kantor, R., Baba, K., Erdosy, U., Eouanzoui, K., & James, M. (2005). Differences in written discourse in independent and integrated prototype tasks for next generation TOEFL. *Assessing Writing*, 10(1), 5–43.  
<https://doi.org/10.1016/j.asw.2005.02.001>

- Cumming, A., Lai, C., & Cho, H. (2016). Students' writing from sources for academic purposes: A synthesis of recent research. *Journal of English for Academic Purposes*, 23, 47-58.
- Currie, P. (1998). Staying out of trouble: Apparent plagiarism and academic survival. *Journal of Second Language Writing*, 7(1), 1–18. [https://doi.org/10.1016/S1060-3743\(98\)90003-0](https://doi.org/10.1016/S1060-3743(98)90003-0)
- Esmaili, H. (2002). Reading-to-write reading and writing tasks and ESL students' reading and writing performance in an English language test. *Canadian Modern Language Review*, 58, 599–622.
- Grabe, W. (2003). Exploring the dynamics of second language writing. In B. Kroll (Ed.), *Exploring the Dynamics of Second Language Writing* (pp.242-262). Cambridge: Cambridge University Press
- Hirvela, A., & Du, Q. (2013). Why am I paraphrasing? Undergraduate ESL writers' engagement with source-based academic writing and reading. *Journal of English for Academic Purposes*, 12, 87–98. <https://doi.org/10.1016/j.jeap.2012.11.005>
- Howard, R. M., Serviss, T., & Rodrigue, T. K. (2010). Writing from sources, writing from sentences. *Writing and Pedagogy*, 2(2), 177–192.
- Hyland, K. (2005). Representing readers in writing: Student and expert practices. *Linguistics and Education*, 16, 363–377. <https://doi.org/10.1016/j.linged.2006.05.002>
- Hyland, T. A. (2009). Drawing a line in the sand: Identifying the borderline between self and other in EL1 and EL2 citation practices. *Assessing Writing*, 14, 62–74.
- Johns, A. M., & Mayes, P. (1990). An analysis of summary protocols of university ESL students. *Applied Linguistics*, 11, 253–271.
- Keck, C. (2014). Copying, paraphrasing, and academic writing development: A re-examination of L1 and L2 summarization practices. *Journal of Second Language Writing*, 25, 4–22.
- Kirkland, M.R, & Saunders, M.A. (1991). Maximizing student performance in summary writing: Managing cognitive load. *TESOL Quarterly*, 5(1), 105-121.
- Lee, J. J., Hitchcock, C., & Casal, J. E. (2018). Citation practices of L2 university students in first-year writing: Form, function, and stance. *Journal of English for Academic Purposes*, 33, 1-11.
- Leki, I., & Carson, J. (1994). Students' perceptions of EAP writing instruction and writing needs across the disciplines. *TESOL Quarterly*, 28(1), 81-101.
- Leki, I., & Carson, J. (1997). Completely different worlds: EAP and the writing experiences of ESL students in university courses. *TESOL Quarterly*, 31, 36–69. <https://doi.org/10.2307/3587974>
- Mansourizadeh, K., & Ahmad, U. K. (2011). Citation practices among non-native expert and novice scientific writers. *Journal of English for Academic Purposes*, 10, 152–161.
- McCulloch, S. (2012). Citations in search of a purpose: Source use and authorial voice in L2 student writing. *International Journal for Educational Integrity*, 8, 55–69.



- Pecorari, D. (2003). Good and original: Plagiarism and patchwriting in academic second language writing. *Journal of Second Language Writing*, 12, 317–345.
- Pecorari, D., & Petrić, B. (2014). Plagiarism in second-language writing. *Language Teaching*, 47, 269–302.
- Pennycook, A. (1996). Borrowing others' words: Text, ownership, memory and plagiarism. *TESOL Quarterly*, 30(2), 201–239. <https://doi.org/10.2307/3588141>
- Petrić, B. (2007). Rhetorical functions of citations in high- and low-rated master's theses. *Journal of English for Academic Purposes*, 6, 238–253.
- Petric, B. & N. Harwood (2013). Task requirements, task representation, and self-reported citation functions: An exploratory study of a successful L2 student's writing. *Journal of English for Academic Purposes*, 12(2), 104–124.
- Plakans, L. (2008). Comparing composing processes in writing-only and reading-to-write test tasks. *Assessing Writing*, 13, 111–129. <https://doi.org/10.1016/j.asw.2008.07.001>
- Plakans, L. (2009a). The role of reading strategies in integrated L2 writing tasks. *Journal of English for Academic Purposes*, 8, 252–266. <http://dx.doi.org/10.1016/j.jeap.2009.05.001>
- Plakans, L. (2009b). Discourse synthesis in integrated second language writing assessment. *Language Testing*, 26, 561–587. <http://dx.doi.org/10.1177/0265532209340192>
- Plakans, L. & Gebril, A. (2009). Investigating source use, discourse features, and process in integrated writing tests. *Spain Fellow Working Papers in Second or Foreign Language Assessment*, 7(1), 47-84.
- Plakans, L., & Gebril, A. (2012). A close investigation into source use in integrated second language writing tasks. *Assessing Writing*, 17, 18–34. <http://dx.doi.org/10.1016/j.asw.2011.09.002>
- Plakans, L. & Gebril, A. (2013). Using multiple texts in an integrated writing assessment: Source text use as a predictor of score. *Journal of Second Language Writing*, 22, 217-230.
- Plakans, L. & Gebril, A. (2013). Toward a transparent construct of reading-to-write tasks: The interface between discourse features and proficiency. *Language Assessment Quarterly*, 10(1), 9-27, <https://doi.org/10.1080/15434303.2011.642040>
- Plakans, L., & Gebril, A. (2017). Exploring the relationship of organization and connection with scores in integrated writing assessment. *Assessing Writing*, 31, 98-112. <https://doi.org/10.1016/j.asw.2016.08.005>
- Plakans, L., Gebril, A., & Bilki, Z. (2019). Shaping a score: Complexity, accuracy, and fluency in integrated writing performances. *Language Testing*, 36(2), 161–179. <https://doi.org/10.1177/0265532216669537>
- Shi, L. (2004). Textual borrowing in second-language writing. *Written Communication*, 21(2), 171–200. <https://doi.org/10.1177/0741088303262846>
- Shi, L. (2010). Textual appropriation and citing behaviours of university undergraduates.

*Applied Linguistics*, 31, 1–24.

- Shin, S. & Ewert, D. (2015). What accounts for integrated reading-to-write task scores? *Language Testing*, 32(2), 259–281. <https://doi.org/10.1177/0265532214560257>
- Spivey, N. N. (1990). Transforming texts: Constructive processes in reading and writing. *Written Communication*, 7(2), 256-287.
- Stockall, N. & Cole, C.V. (2016) Hidden voices: L2 students' compensatory writing Strategies. *Teaching in Higher Education*, 21(3), 344-357.
- Thompson, C. (2005). 'Authority is everything': a study of the politics of textual ownership and knowledge in the formation of student writer identities. *International Journal for Educational Integrity*, 1, 1–12.
- Thompson, C., Morton, J., & Storch, N. (2013). Where from, who, why and how? A study of the use of sources by first year L2 university students. *Journal of English for Academic Purposes*, 12, 99–109.
- Weigle, S. (2002). *Assessing writing*. Cambridge: Cambridge University Press.
- Weigle, S. (2004). Integrating reading and writing in a competency test for non-native speakers of English. *Assessing Writing*, 9, 27–55. <https://doi.org/10.1016/j.asw.2004.01.002>
- Weigle, S. & Parker, K. (2012). Source text borrowing in a reading/writing assessment. *Journal of Second Language Writing*, 21, 118-133. <https://doi.org/10.1016/j.jslw.2012.03.004>
- Wette, R. (2010). Evaluating student learning in a university-level EAP unit on writing using sources. *Journal of Second Language Writing*, 19, 158–177.
- Wette, R. (2017). Source text use by undergraduate post-novice L2 writers in disciplinary assignments: Progress and ongoing challenges. *Journal of Second Language Writing*, 37, 46-58. <https://doi.org/10.1016/j.jslw.2017.05.015>
- Wette, R. (2018). Source-based writing in a health sciences essay: Year 1 students' perceptions, abilities and strategies. *Journal of English for Academic Purposes*, 36, 61-75. <https://doi.org/10.1016/j.jeap.2018.09.006>
- Yang, H.C. (2009). *Exploring the complexity of second language writers' strategy use and performance on an integrated writing test through SEM and qualitative approaches* (Unpublished doctoral dissertation). University of Texas at Austin, TX.
- Zhang, X. (2017). Reading-writing integrated tasks, comprehensive corrective feedback, and EFL writing development. *Language Teaching Research*, 21(2), 217-240. <https://doi.org/10.1177/1362168815623291>