



The Impact of Learning-Oriented Assessment on Linguistic Features of Written Texts among Malaysian Tertiary-Level Students

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Introduction

Writing is a vital language skill for English as a Second Language (ESL) learners at tertiary level. Emerson (2021) asserts that tertiary-level students demonstrate their knowledge of both English and course content in a written English format; therefore, it is essential for them to be familiar with the requirements of the written English language. Other than the tertiary-level students' perspective on the written language, it is important to investigate the extent to which these learners are familiar with the linguistic features of written English, as it is cumbersome to guarantee success at tertiary level without meeting the essentials of written English language in ESL contexts (Bulqiyah et al., 2021). Features such as knowledge of lexical items, coherence and cohesion, and grammatical competency definitely affect the academic success of the students (Pattison et al., 2022).

In the context of Malaysia, written English has been the subject of numerous recent studies. (Ghulamuddin et al., 2021; Mehat & Ismail, 2021; Sufi & Idrus, 2021). Mehat and Ismail (2021) assert that the main relevant reason for errors found in written texts among Malaysian students at higher education is a lack of knowledge of the linguistic features of written text. More specifically, Amayreh and Abdullah (2021) pointed to coherence and cohesion as one of the main problems in the essay writing of Malaysian students in the second language (L2). Elsewhere, Kalajahi and Abdullah (2015) highlighted discourse connectors as a problem in Malaysian students' writing in L2. In addition, Ghulamuddin et al. (2021) saw grammar as a challenge for Malaysian tertiary-level students. The consensus among these studies is that Malaysian students at higher educational levels need help with the linguistic features of written English language.

In light of this, the researcher in the current study, aimed at utilizing Learning-Oriented Assessment (LOA) as a possible approach to decrease the challenges of Malaysian tertiary students in writing. LOA is a cognitive approach to language learning which has been utilized earlier to solve language problems for students in many contexts. It is a learner-centered approach in which the learners are made aware of their areas of incompetency through formative assessment and feedback (Fazel & Ali, 2022). Thus, the learners can measure their progress and plan to solve the problems which have already shown themselves through formal or informal assessment (Davidson & Coombe, 2022).



Research Question

1. What is the effect of LOA on the written performance of Malaysian tertiary-level students?
2. What is the impact of LOA on the linguistic features of written English among Malaysian tertiary students?

It should be mentioned that based on the open version of the International English Language Testing System (IELTS) written exam's rubrics, written performance is defined in terms of grammatical range and accuracy, coherence and cohesion, task response, and lexical knowledge.

Literature Review

Learning-Oriented Assessment (LOA)

The widespread use of cognitive science in education has resulted in designing language learning approaches that are not purely lecture-based. Among these approaches, LOA can be highlighted. Jones et al. (2016) see LOA as an approach that uses both formal and informal assessment as a way to increase students' understanding of their problems prior to finding their answers. The main ideology is that assessment of the content prior to teaching makes education goal-oriented and supports learning, as the students are aware of what they should pursue (Carless, 2015). Thus, assessment acts as a bridge between learning and teaching.

Most pedagogical models in LOA center around two main features, i.e., developing evaluative expertise and students' engagement (Zeng et al., 2018). Engagement in LOA is more meaningful compared to non-cognitive approaches since it is gained not through lectures but through feedback and assessment. The learners have more responsibility for their own development compared to conventional approaches, and play a key role in defining the learning needs (Purpura, 2016). Other than these features, Coombe et al. (2020) believe that language assessment literacy is a significant factor to consider when LOA is at work. They believe that a relevant assessment theory should be utilized when language learning with a specific group of learners with a certain cultural background is targeted. Therefore, informal and formative feedback, which is often used in LOA, is of considerable help to the learners. The learners can discuss their expectations and culture niches while writing their essays. In addition, LOA should center on assessment. The main difference between LOA and most conventional approaches is that unlike LOA, these approaches focus on lectures delivered to the learners prior to actually conducting the task (Purpura, 2016).

The consensus in the literature is that LOA is a suitable approach to language learning (Turner & Purpura, 2016). For example, Beikmohammadi et al. (2020) note that EFL instructors in the content of Iran tend to use LOA to encourage their learners for more meaningful learning. In another study in Thailand, Viengsang and Wasanasomsithi (2022) observed a positive impact of LOA on the reading ability of the learners. Leung (2020) also observed a significant impact of LOA on self-directed learning in language classes. However, studies on LOA and writing, especially considering the linguistic features, are scant. Such studies encourage the researcher to investigate the impact of LOA on linguistic features of the written language among Malaysian tertiary-level students.

Assessment

The term assessment is more than simply investigating how much the learners know of the course content. Extensive research in this realm has resulted in the formation of different forms of assessment. In general, the type of assessment targeted in LOA is assessment in favor of learning (Turner & Purpura, 2016). In this form of assessment, it is important to inform students what they know and what they need to learn. Therefore, dynamic assessment is often used in LOA classes (Poehner, 2008). In addition, Wigglesworth

and Frost (2017) contend that LOA is a process-oriented learning approach rather than a product-oriented classroom assessment (often through task performance); therefore, it can be of great help to the learners (). In LOA classes, learners are expected to organize their thoughts and be able to take responsibility for their learning (Ansarian & Teoh, 2018). Therefore, it is desired to increase the multiple language skills of the learners. In this sense, integrated language assessment can also help the learners rather than assessing language skills separately (Lee, 2015). Finally, the overall target of LOA is to increase language skills in the learners. However, depending on the overall learning objectives, content-based knowledge of the learners may also be targeted. Therefore, at times, it might be necessary to assess content knowledge through the target language (Lopriore, 2018). This significance increases the need to focus on linguistic features in written English.

Theoretical Framework

LOA classes present the learning content through assessment tasks which require the learners to use their problem-solving skills. In this sense, one of the profound roots of LOA is in cognitive learning theory, based on which learners should be able to decode and resolve learning problems (Carless, 2009). Another aspect of LOA, similar to other collaborative approaches to learning, is based on Vygotsky's Zone of Proximal Development (ZPD), which indicates the significance of group work to excel in one's area of knowledge through feedback (Vygotsky, 1987).

Method

Design

This study has a quantitative nature with a positivist perspective. It benefits from a between-subject design in which a control group is compared to an experimental one. In the positivist view, what is observed is accepted as reality. This ideology is suitable for quantitative analysis (Lin et al., 2019), as the researcher does not make conclusions based on qualitative factors such as how reality is formed in the minds of the respondents.

Instruments

The public version of the International English Language Testing System (IELTS) written exam's rubrics were used as scoring criteria by the examiners in this study. The rubrics measure the linguistic features of the texts in the areas of grammatical range and accuracy, coherence and cohesion, task response, and lexical knowledge. In addition, 17 IELTS writing Tasks 2 were chosen from the IELTS Cambridge Practice Tests book series. These tests were selected and used in this study as pretest (n=1), treatment (n=15), and posttest (n=1).

Homogeneity Test

The Nelson general language proficiency test was implemented as a homogeneity test. The test has 50 multiple-choice items. In the homogeneity test, focus was not given to the writing skills of the participants, but rather their general English knowledge was tested. After the homogeneity test, the writing skills of the participants were assessed through the pretest.

Pretest/Posttest

Two IELTS writing tests were used as pretest and posttest. The tests were adopted from the Cambridge IELTS practice tests. Focus was given to Task 2 (essay writing) of the academic module.

Participants

Fifty-six Malaysian tertiary level students studying at a public university in the academic year 2022-2023 were non-randomly chosen through purposive sampling as participants for the study. The participants were assigned to a general language course in their first year of higher education. Table 1 shows the demographics of the participants.

TABLE 1
Demographics of the Participants

N	Gender	Age	Educational Background	Ethnicity
1	Male (n=39)	17-22	High school Diploma	Malay (n=11) Malaysian Chinese (14) Malaysian Indian (n=4)
2	Female (n=17)	18-20	High School Diploma	Malay (n=4) Malaysian Chinese (n=7) Malaysian Indian (n=6)

Other than these participants, three experienced examiners were asked to score the pretest and posttest essays as raters.

Procedure

According to Carless (2009), of prime significance in designing an LOA course is to consider the outcome and what is expected from the learners. Since the expectation in the current study was to increase the learners' control of the linguistic features of the text, writing tasks were given to the participants. Other aspects of the procedure were authentic situations, as suggested by Chapelle et al. (2018) through formative assessment, as they state that:

LOA tasks should stimulate sound learning practices by encompassing worthwhile educational value in and of themselves...This principle requires assessment tasks to embody the desired learning outcomes...which includes promoting desired learning dispositions... and using practical, real-world situations. Second, LOA tasks should be designed to enhance learners' motivation and promote student engagement by stimulating their interest. (p.10)

After signing consent forms the participants were administered the Nelson language proficiency test as a homogeneity test. In addition to that and during the same session, an IELTS writing test (Task 2) was administered as a pretest. Using the results of these two tests, 56 participants out of the population of 76 students were selected by considering the normal distribution of data.

The Experimental Group

These participants went through 15 sessions of LOA instruction in which they were given topics to write first, and were then assessed in terms of their writing skills (formative assessment). Focus was not given to lecturing prior to assessment, and writing sessions were conducted collaboratively in which the participants could benefit from their group mates' feedback prior to being assessed by the course teacher. Following

this procedure (15 sessions), the participants were given another IELTS writing task 2 topic to write as a posttest. Both the posttest and the pretest were scored by three experienced raters.

As suggested by Carless (2009), three main foci of the course, were on assessment as learning tasks, self-evaluation, and feedback. Therefore, each treatment session began with assigning an IELTS writing task (assessment as learning task). Then, the participants were expected to complete the task and evaluate their areas of weakness in completing the writing task. Next, the essays were exchanged between the groupmates in the class, and they could give their feedback on each other's essays. The essays were finally collected by the teachers, and written feedback was given to the participants by the next session.

The Control Group

In the control group, the participants followed the conventional course suggested by the school and in each session they were lectured on how to write IELTS writing tasks. They were then asked to write their essays. The lectures focused on learning about the main structure of the essays, writing thesis statements, and paragraph development. Similar to the experimental group, focus in the control group was given to argumentative writing; however, the main differences were as follows:

1. Experimental group learners were not lectured on how to write the essays.
2. There was no focus on collaboration in the control group,
3. Assessment did not play a role in the control group.

Data Analysis and Results

Statistical Package in Social Sciences (SPSS) was used to analyze the data. Initially, the normality of the distribution of all test scores is shown in Table 2.

TABLE 2
Normality of Distribution

	<i>N</i>		<i>Min</i>			<i>Max</i>		<i>Skewness</i>		<i>Kurtosis</i>	
	<i>Statistic</i>	<i>Statistic</i>	<i>Statistic</i>	<i>Mean</i>	<i>SD</i>	<i>Statistic</i>	<i>Std. Error</i>	<i>Statistic</i>	<i>Std. Error</i>		
Nelson	76	30.00	48.00	39.55	4.09	-.240	.276	-.180	.545		
Pretest control	27	18.00	25.00	21.85	1.83	-.412	.448	-.634	.872		
Pretest experimental	28	19.00	25.00	22.00	1.72	-.516	.441	-.730	.858		
Posttest control	27	20.00	27.00	23.22	1.98	.081	.448	-.993	.872		
Posttest experimental	28	22.00	29.00	25.42	1.79	-.331	.441	-.819	.858		

As observed in Table 2, ratios of skewness and kurtosis range between -1.96 and +1.96; thus, based on Russo (2011) the normal distribution of all tests can be assumed.

Reliability

Cronbach alpha formula was used to assess the reliability of the data sets in each group. The indices were between 7.20 and 7.40. Therefore, the researcher assumed that the data were reliable.

Validity

Validity was measured through Bartlett's test and by considering multicollinearity of the scores. No high or low multicollinearity was observed and the factor analysis results ranged between .74 and 7.5 for all tests. As a result, the results' validity was assumed.

Pre-analysis

In order to make sure there is no considerable difference between the participants in the two groups, an independent samples t-test was run. The results of the independent samples t-test for the Nelson test, ($t(53) = -.218$, $Sig = .667$), indicated that the difference between the control group and the experimental group in terms of their general language proficiency is not significant. In addition, as the essays were scored by three experienced EFL teachers, inter-rater reliability through coefficient correlation was checked, in indices that ranged between .80 and .823. Therefore, inter-rater reliability was assumed.

TABLE 3
Mean Comparison; Pretest

	Groups	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Std. Error Mean</i>
VAR00002	Control	27	21.8519	1.83353	.35286
	experimental	28	22.0000	1.72133	.32530

As shown in Table 2, the control group's mean ($M = 21.85$) and the experimental group's mean ($m = 22.00$) are close. This difference was tested through inferential statistics in Table 4.

TABLE 4
Independent Samples T-test; Pretest

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	<i>Sig. (2-tailed)</i>	<i>Mean Difference</i>	<i>Std. Error Difference</i>	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.096	.757	-.309	53	.758	-.148	.4793	-1.1096	.8133

As shown in Table 4, ($t(53) = -.309$, $Sig = .758$), there is no a significant difference between the control group and the experimental groups' writing scores in the pretest. Thus, it can be assumed that the participants were homogeneous in terms of writing prior to the main study. The same procedure was conducted for the posttest (see Table 4 and 5).

Posttest

The posttest scores of the participants were compared through an independent samples t-test.

TABLE 5
Mean Difference; Posttest

Group Statistics				
Group	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Std. Error Mean</i>
Control	27	23.2222	1.98714	.38242
Experimental	28	25.4286	1.79358	.33895

As shown in Table 5, the mean of the control group ($M=23.33$) is less than that of the experimental group ($M=25.42$).

Using inferential statistics, the mean differences were evaluated (Table 6).

TABLE 6
Independent Samples T-test; Posttest

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	<i>Sig. (2-tailed)</i>	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Equal variances assumed	.292	.591	-4.326	53	.000	-2.206	.5100	-3.229	-1.183

As shown in Table 6, independent Sample t-test results ($t(53) = -4.32$, $Sig = .000$) indicate a significant difference between the control group and the experimental group; thus, it is assumed that LOA can significantly affect the linguistic features of written English of Malaysian tertiary-level students.

A similar procedure was conducted for grammatical accuracy and range scores ($t(53) = -3.42$, $Sig = .000$), use of lexical items ($t(53) = -1.84$, $Sig = .001$), coherence and cohesion ($t(53) = -2.38$, $Sig = .002$), and task achievement ($t(53) = -4.77$, $Sig = .022$). As perceived from the results, other than task achievement, all other linguistic features of writing English in the experimental group showed improvement.

Discussion

This study revealed that LOA can have an impact on the linguistic features of the written language among Malaysian tertiary-level students, although task achievement was moderately affected. The findings are, to a great extent, in line with the literature. Most studies on cognitive approaches in language learning reveal that activating the students' problem-solving skills through practical language learning tasks increases their proficiency (Ansarian & Teoh, 2018; Öztürk & Çakıroğlu, 2021). As for the writing skills, Yu and Liu (2021) assert that the writing classes with feedback sessions increase the students' grammatical accuracy. Another feature of LOA which seems to have an effects on students' progress is collaboration. As noted by Zhang and Zou (2022), collaboration is very effective when it comes to writing classes, as the learners' proximal zone cannot improve the learners per se, and they need to make use of other students' areas of knowledge.

Writing is an objective-based course. Carless et al. (2006) believe that LOA is very suitable for objective-based courses with a target which is set from the beginning. To them, assessment plays a key role in the LOA learning process and can make the learners aware of their shortcomings. This can explain why the learners' performance in the writing classes was increased.

Though the literature on LOA and writing in the second language is scant, the findings show that LOA can have effects on the linguistic features of written English. For example, Yang (2020) believes that LOA can positively affect learning of both grammar and lexical items. Absolum (2011) saw a clear impact of LOA on structure and coherence in writing.

Conclusion

It was found that LOA can have positive effects on the written performance of Malaysian tertiary-level students in terms of coherence and cohesion, use of lexical items, and grammatical accuracy; however, task

achievement was not affected. Theoretically speaking, LOA engages students' problem solving skills in the learning process and makes the learning process more meaningful. Other areas which require more attention are the possible impact of LOA on speaking skills. Speaking is a productive language skill similar to writing, and studies on LOA and speaking proficiency in L2 are lacking.

The Author

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