

Investigating the Role of Process-Oriented Assessment in Enhancing Writing Development in EAP Learners

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ABSTRACT

This paper aims to examine the impact of process-Oriented assessment in Saudi EAP learners' writing when it comes to coherence and organization; grammar & lexical variation ; development of argumentation. Introducing a quasi-experimental research design, the research contrasted formative feedback influence on enhanced writing between the experimental and control group upon being subjected to traditional assessment. Evaluation shows that an emphasis on technological processes enhances general learning of organizational skill and argumentation; however, on grammar and lexical coverage its effectiveness is comparatively low. The results indicate that process approach is helpful but may require some additional forms of direct instruction to contribute to the elaboration of balanced writing. Ideas for EAP instruction in Saudi Arabia require that method of assessment adopted to be complex and not just rely on one area.

Keywords: process-oriented assessment, EAP, writing development, formative feedback.

Introduction

In EAP learning settings students should be able to acquire academic writing competence due to the complexity of the language in relation to their involvement in academic discourse. A recent set of studies has shifted the focus of assessment in this regard from the more conventional and end-of-unit type of tests to formative and process-based assessments that advances learning, which is also, developmental (Wilsey et al., 2020; Boudett et al., 2020). Conventional forms of assessment where there are typically only one end product assessment that may provide little feedback to the students and primarily look at the end result performance often neglect the different aspects of language learning development, especially in EAP learning environments. Conversely, process-oriented/diagnostic assessments emphasize frequent feedback, multiple submission and, revisions which correspond with developmental writing (Zhang & Hyland, 2018).

Process-oriented assessment is conceived out of tenets of formative assessment which have been well researched for their positive impacts on the learners' interest. As such, the assignments and feedback provided within this approach means that the students can adjust and adapt their work by incorporating the critique they receive from their teachers (Sadler, 1989; Boekaerts, 1997). Cheng and Fox in their study that highlighted the idea that formative assessments foster learning-centered model of development of understanding that put the students in charge of their learning processes. This shift is

particularly helpful in EAP because to succeed students have to maneuver through the complex academically relevant forms of writing which go beyond mere language skills but entail, analysis and reasoning (Flowerdew, 2016). If applied in writing, process-orientation corresponds with the process of writing as students can always make changes to the work in order to meet the requirements of the academic writing (Bailey, S., 2003).

Reviews and research on the EAP-specific formative feedback show that students profit from multiple cycles of feedback that allow for imitation of target language explicit features and development of genre-specific and subject- expert patterns (Cheung, 2014; Huang & Jun Zhang, 2020). In this direction, feedback offered in a process-based evaluation approach is described as being knowledge-enhancing in the sense that it enables learners move from learning English in a general social communicative sense to using language to accomplish purposes specific to academic contexts (Abdullah et al., 2019). In addition, formative feedback permits students to develop writing not as a fixed product but as a sequence of drafts, which creates a better view of the writing process being a cyclical one where students reflect on their composing Camps (2009). This iterative model of learning is in close harmony with sociocultural framework by Vygotsky (1978) as learning is enriched through interactions and feedback which are adopted in the process-based assessments.

However, such a performative notion of assessment has not recommended formative feedback practices comprehensively across EAP despite promising facets to these interventions; The examination system, ease of grading, and the it-came-in-the-end paradigm have kept formative assessments to a minimum in most instances in EAP. However, such methods have been criticized in that they do not in any way help students to acquire the right skills for their academics. For example, Hift (2014) positing that the perspectives by summative assessments may be misleading, especially in writing skills, where the procedure and editing are part of the comprehension. Process-orientated assessment addresses these limitations through a focus on foster the improvement of which is essential for the development of the enhanced writing skills necessary for academic discourse (Carless, & Boud, 2018).

Similarly, the rationale that has supported the application of process-oriented assessment in EAP setting also applies to other formative writing sub-skill such as the cohesiveness, the flow and the argumentation. Jones et al. (2016) claimed that process-oriented assessment enhances coherence because learners have an opportunity to reorganise their content when developing the second piece. In the same manner, Strongman (2014) has shown how through feedback cycles students do not only progress in choosing better vocabulary and in syntactic complexity, but indeed in making form, in stylistic versatility and in rhetorical sensitivity. Moreover, from the analysis of Piirisjärvi, Kohen & Kramarski (2018) and two case-studies, the process orientation has been found to foster metacognition and therefore promote mechanism by which learners can assess themselves, which is a major element towards Learning achievement.

Process-oriented assessment in EAP is however still a growing area and although there has been much focus on the value of formative feedback, more recent work boosts of both formative and summative functions (Bhat & Bhat, 2019). The idea of

incorporating the process-based approach within the summative constructs, as discussed in the recent literature, affords students developmental feedback from formative to be used along with the summa assessments while holding the responsibility of the final scores (Black, 1993). The integration could further rebut criticisms usually levied at process level assessment suggesting that process oriented assessment in general lacks the rigor that is expected in normative approaches to assessment while at the same time fostering life long learning and development, as posited by Molloy et al. (2020).

The recent literature on process-based assessment supports the role of process-based approach in enhancing writing development in EAP settings since it recognises certain flaws of traditional top-down assessment paradigm . As a result, the approach to process-oriented assessment is in practice in line with the theoretical goals of EAP since it not only encourages learning but also provides constructive feedback and involves self-reflection, which in turn help students improve the level of writing and achieve the envisioned educational objectives (Nesbit, 2012). Therefore, the findings of this study may help expand existing understanding of the impacts of PA by investigating the specific relationships between process-orientation and aspects of EAP writer's developmental profiles, and provide relevant assessment applications in language learning.

Problem of the Study

Teaching writing in EAP entails more than the ability to write well in English; the learners have to be acquainted with standard conventions in academic writing, logical analysis, and rationales. Summative approaches of assessment are the most dominant in traditional systems of assessment and these only give a limited indication of the student's developmental profile in the write area. In KSA, English is taught as a foreign language and therefore presents EAP learners with a further difficulty since they have to undertake transition within the newly-acquired-foreign language as well as within the academic mode of writing and communication that could prove incompatible with their first cultural and linguistic practices. Process-Oriented Writing Assessment as an alternative to product-Orientation Writing Assessment which directs assessment to focus on formative feedbacks, drafts and revisions to achieve the main aim of improving writing has had little study on its effects on enhancing EAP Saudi learner's writing. Thus, this research is set to fill this gap by assessing how process-oriented assessment impacts Saudi EAP learners' writing abilities as well as identifying whether or not this technique can facilitate the development of Saudi learners dealing with diverse linguistic and academic demands.

Questions of the Study

1. Does process-oriented assessment significantly enhance the overall writing development of EAP learners in Saudi Arabia?
2. What specific aspects of writing (such as coherence, structure, grammar, and lexical range) are most improved through process-oriented assessment among Saudi EAP learners?

3. How does the iterative feedback mechanism in process-oriented assessment impact Saudi EAP learners' motivation and engagement in developing academic writing skills?

Significance of the Study

From an academic angle, this study has important implications for EAP practice in KSA with new emphasis on English for academic and career achievement. Given that the focus of this study was on the impact of process-orientation assessment on the improvement of writing ability in Saudi EAP context, this work adds knowledge to the currently limited body of literature on writing assessment that can be used to respond to the challenges encountered while teaching Saudi EAP learners. Such observations can help in strengthening the teaching methodology as well as curriculum setting focusing the need for feedback accompanied by revisions of the written work. In addition, this research may offer specific suggestions to teachers and policymakers concerning the assessment of learning outcomes and the necessity of going beyond forms of assessment that do not foster learning. Through examining the effects of process-based approach in assessing writing learning achievement, this study seeks to enhance a shift toward constructive assessment in Saudi EAP learning environments, to unlock advantages to learners across associated academic achievement endeavours.

Terms of the Study

This paper aims to analyse the impact of process approaches on writing development for Saudi Arabian learners in an EAP setting. It was done in one academic semester as it was deemed imperative to have enough cycles of assessment, feedback and students' feedback. This timeframe offers an insight into the process of writing development over several cycles of draft and feedback which is important in learning the effects of process-driven methodologies on EAP learners writing skills. In this study, process-oriented assessment is defined as an instructional approach that focuses on formative feedback, student voice and draft productions. Moreover, unlike product approach that tend to compare final products to predetermined instructional criteria, process-oriented assessment entails giving frequent feedback with revision as a key strategy so that the learners learn to act on the feedback given to them for the improvement of their written work. The study targets Saudi EAP learners in tertiary institutions offered in universities where facility in the English language is imperative.

Limitations of the Study

Nonetheless, a number of limitations are recognised regarding this study. First, the study is conducted on a small group of students from a single academic institution in Saudi Arabia. Though the study may be useful in enhancing EAP provision in the target institution the findings might not be generalizable to other EAP contexts in Saudi Arabia. Further, acknowledging that the present study concerns Saudi learners, one may question the validity of the findings to EAP learners from different linguistic/cultural experiences. A limitation arising from the study is that it looked at only one semester; while this is convenient for studying some developmental trends, it may not be enough to capture the deeper effects of process-oriented assessment on the development of writing. Finally, they found that there were possible limitations concerning the sources of data and assessments that are based on self-reporting and the

assessment made by instructors, as it may possess subjectivity. Nevertheless, the current study offers a starting point for valid, and practical sentiments, which could be advanced in other diverse contexts of EAP and more timeframes.

Literature review and Previous studies

Fluent and accurate writing in EAP has been found important for learners in non-ELS countries where students have to deal with various linguistic and academic challenges most importantly in tertiary institutions (Hyland, 2019). In Saudi Arabia, EAP is crucial for learning, as learners mandatory are subjected to English- speaking education institutions across the kingdom universities. In this regard, assessment instruments hold the centre stage regarding how learners engage and rate their writing abilities. Previous examinations of writing, which often focused on end-point measures and not development, have been criticised for not adequately providing for EAP learners, since learning processes could be obscured through such assessments (Yin, 2005).

An engagement assessment of processes that are based on formative feedback, drafts, and revisions present a model that is differ from traditional models of engagement through gradual progress and student-centered learning mechanisms. Writing to learn, or process writing as it is commonly referred to, helps individuals to change their approach to write, from the traditional more-is- better model to a process focused on writing as a developmental process and not an end product as pointed by Molloy et al. (2020). This approach is especially coherent with the formative assessment approach that involves feedback and changes rather than one pass/fail ranking (Lefroy et al., 2015). In the light of literature, when formative feedback is provided with a process approach it helps the students in enhancing their educational area, aspects like coherence, clarity, and argumentation which are cardinal parts of EAP writing. In addition, formative feedback within a process model enhances learning engagement, motivation as opposed to the traditional end of the program outcomes (Sierocka, 2014).

Process-oriented assessment also complements socio-cognitive learning theories which supports learner interaction and feedback. According to Vygotsky (1978), learner's performance is enhanced when the degree of difficulty inherent in a task is just beyond what the learner can accomplish without any assistance or prompt. When writing, this feedback is able to take learners from mechanical corrections to deeper, beneficial changes in structure, thinking, and persuasion. Cheng and Fox contend that this theoretical framework makes process-oriented assessment particularly beneficial in EAP settings because it promotes language development and the analytic thinking important for achievement. The recurrent loop of this assessment model helps learners to engage in writing more as a task that must be polished into perfection throughout the learning process and not as a one-off endeavour, which is fundamental in building specific writing competency in academic environments, as indicated by Molinari (2019).

Literature reviews have demonstrated how process-oriented assessment was practiced in EAP settings and its consequences on numerous perspectives of writing. Therefore, the study by Han and Hyland that involves process-oriented assessment and its focus on formative feedback and drafting to enhance writing capability stressed that

students' performance in structuring an argument, maintaining the focus of the arguments, and integrating the critical perspective in their arguments were enhanced. The study on EAP learners in Asia for instance credited iterative feedback with enhancing linguistic accuracy and the unity of writers, thereby supporting the process approach to assessment.

In like manner, Bitchener & Storch (2016) analyzed written CFF in relation to EAP writing using SD which emphasized the effectiveness of multiple comment ONLY cycles. Their results show that students who get frequent, formative feedback develop better, specifically in terms of language correctness and lexical density, proving that process-based assessment effectively caters for ordinary EAP problems. Further, Knight et al. (2020) explained his study on the effects of feedback in the EAP writing classes with the sample conclusion that formative feedback not only enhance students' written work but also develop the ways of coming across the conventions of academic writing. These results are also consistent with the current understanding of feedback where feedback is most effective when it forms a cyclical process rather than a one-shot activity in response to the end product (Hattie & Clarke, 2018).

Mansour (2021) identified the concerns that Saudi EAP learners encounter in which stall and focus on the instructional approaches that would enhance the second language and academic writing ability. In her study, Mansour has underlined the possibility of the formative assessments to overcome these issues, pointing out that the students seem to have difficulties with the transition from the general English to the academic English. As is clear from this, it is important that the EAP programs in Saudi adopt process approach evoking the inherent system for enhancing the learning process for students bent on developing their academic writing abilities step by step.

Additionally, Shen et al. (2023) focused on the effects of formative, process-oriented feedback on EAP learners' motivation and demonstrated that students in the process-oriented framework reported higher level of motivation and effort on writing. This research also found that feedback enabled students to put writing into a process that can be enhanced, thus enhancing their attitude toward academic writing. This supports Toufaha (2024) who have established that providing formative feedback enhances the coherence and organization of students' academic writing and that when is learning process-oriented, it is embraced well by the students and enhances the appreciation of the academic writing profession.

Subsequent investigations of the relationship between assessment and motivation in EAP have also highlighted the need to adopt process-based forms of assessment. Yan et al. (2020) elaborate on the ways that the formative feedback not only is useful in refining the language and structure of the assignment but also enhances learner's writing self-efficacy. In such countries as Saudi Arabia, where English is taught as a foreign language, building learners' confidence and perseverance in EAP classroom should be the foremost priority while training student for demanding task in academic writing. Altogether, this line of research affirms the claim that process-based assessment could bring about the development of the more comprehensive, learner-focused approach towards the teaching and learning of writing in EAP for the Saudi learners.

Methods

This research comprises a quantitative paradigms and thus chose a quasi-experimental research design to assess the effect of process-oriented assessment on writing gains of EAP learners in Saudi Arabia. Used in this context, this design is suitable for the study since it enables a systematic comparison between an experimental group and a control group in terms of the processes of an instructional intervention (process-oriented assessment) over time. The study involves the use of non-randomized groups because of reality and feasibility of the research scenarios Hence adopting the quasi-experimental research design enables the research to be undertaken within actual classroom situations relevant to the Saudi Arabian EAP educational system.

Participants

Participants in the present study were purposively recruited from a university-level EAP program in Saudi Arabia which guarantees that the sample comprised the Saudi students in the process of mastering academic English. purposive sampling method was adopted for designing the study for 60 participants leveling out all prior differences such as academic background and English proficiency among the respondent which may cause confounding factors in the study. The sample was divided equally into two groups: Experimental group included thirty students who underwent process-oriented assessment of their learning progress while the control group consisted of thirty students on whom traditional methods of assessment were applied. Such a division was useful in making comparisons with respect to the results depending on the type of assessment. A written informed consent was sought from each participant and each student was given a code number to abide with the established ethical principles in the course of the study.

Research Instruments

In the primary research data collection instrument, writing pre-test and post test were conducted on both the groups. These assessments were developed to assess coherence, organization, and grammar; lexical variety; and argumentation for EAP students' academic writing. The design for each of the test prompts used in the study was derived from standard EAP assessment frameworks such as, IELTS and TOEFL so as to enhance validity across the different assessments. Scoring of the tests was based on an adapted version of the EAP criterion; this made it possible to provide performance feedback at component level to the students. This rubric offered specific scores for each element of writing as such it offered an analytical score where the progress of each learner in certain areas of writing was assessed.

Also, two experienced EAP instructors agreed to act as the independent testers for the tests. To minimize the possibility of the interpretation of results, both raters were trained on the adapted rubric to provide validity in the scoring. The application of the dual raters was essential since it enabled aims at ensuring the inter-observer reliability and reduce Bias. That is for any rater who differed from other raters, the scores were discussed and an average was taken to the final data for each participant. The application of this rationales in the study helped enhance the reliability and accuracy of the data collected thus improving the validity of the study.

Procedure

The study lasted for one semester, which enabled cyclical feedback that is critical for the identification of incrementally measurable changes in the writing processes. Pre-test was given at the beginning of the semester to both groups as the first step in the procedure. This pre-test served as the control point through which the extent of improvement of each participant in terms of writing could be readily ascertained as in a post-test after the intervention.

After the pre- test the experimental group was exposed to process oriented assessment. This concerned a formative assessment-feed back-revision cycle where the students had to submit their written assignments at three different points in the semester. In this process, students got corresponding feedback according to the given rubrics with focus on the aspects for improvement concerning coherence, organization, grammar and lexicon. This formative feedback was meant to ensure that students took their work to another level by incorporating the feedback in future papers. This cyclic work let students attain a relevant perspective on school writing styles because they were provided with many shots at using feedback, editing, and enhancing their drafts step by step.

While they also wrote the same papers as the experimental group, they underwent traditional assessment practices and only received an overall score at the end of the writing tasks. This method was practicable for many EAP programs in Saudi Arabia since feedback is usually given at the end of the work without intermediate contributions during the drafting process. Thus, the given approach helped the study to compare the traditional assessment model with the process-oriented one, and, thus, outside the interval of the formative feedback and revision specifications on writing advancement, as it was stated in the literature.

Data Collection

The quantitative data consisted in the scores obtained in the pre-and post-tests of the two groups so that a clear contrast could be made as to the development of the students in terms of writing of the semester in question. The two trained raters analysed the tests according to the modified EAP rubric explaining the criteria for coherence, organisation, grammar, lexical variety and arguments. These components were assessed and documented in order to obtain an average tally on the performance of each participant's writing skills before and after the study.

It also maintained a form of scoring criterion that can be directly compared between both groups and between the two testing periods, thus sets the stage for evaluating the improvement to the intervention made. This method of data gathering gave quantitative values to the different genre components accurately and enabled the study to respond to the questions that were posed in the research pertaining to which areas of writing received the biggest boost from process-oriented assessment. The quantitative data from the rubric scores, therefore, informed more detailed statistical analysis for overall and the specific parts of the students' writing improvement.

Data Analysis

In order to answer each research question, the data analysis plan was constructed. First, there is mean scores and standard deviations for the experimental and control groups' pre-test and post-test results obtained. These descriptive statistics helped to map the state of the first writing skills in both groups, as well as the changes that occurred during the semester.

In order to establish the importance of change in each group the difference between the first and second task within the same individuals was analyzed using the paired samples t-tests. The findings were evaluated based on the comparison of the difference between the pre-test and post-test results of the experimental group that underwent process-oriented assessment and in the pre-test and post-test results of the control group that underwent traditional assessment. A learning theoretical prediction, if post test scores were significantly higher than pre test scores in the experimental group and not in the control group, then process assessment played a more proactive role in the progressive improvement of the students' writing skills.

To determine the mean gains between the two groups and compare the effectiveness of the process-oriented assessment to conventional ones, an independent samples t-test was used. This test asked the research question of whether process-oriented assessment promotes progress in EAP learners' writing capability if done to a more extensive degree than in the control group study.

To reduce risk and Itsb avoid basing the results on the difference in the writing ability of the experimental and control groups at the start of the study, an Analysis of Covariance (ANCOVA) with the pre-test scores was used to control for pre-test mean scores. This was useful in eliminating influence of baseline data to draw a new set of post-test scores since this helped to reduce variability due to baseline influences making any observed differences due to the intervention rather than at the baseline. The ANCOVA was useful in identifying the effect of the process-orientated assessment for writing sub-features including coherence, organization and grammatical correctness In analysing the results of the study.

Last, for all the analysis conducted the effect size was computed to evaluate the magnitude of the effects. Where statistical significance tells us whether the results could simply have been due to chance, effect sizes give a measure of the practical impact of the changes, revealing just how significant these changes are for practical application in EAP settings. Effect size measures therefore provide further insight into the educational significance of process-approach to assessment in establishing the worsh recognise practical applications of this form of assessment for facilitating Saudi EAP learners' academic writing proficiency.

Results

Table 1. Inter-Rater Reliability Test (Cronbach's Alpha)

Writing Component	Experimental Group	Control Group
Coherence	0.88	0.85
Organization	0.90	0.87
Grammar	0.86	0.84

Lexical Range	0.89	0.83
Argumentation	0.87	0.86
Overall Alpha	0.88	0.85

Coefficient of Cronbach’s Alpha for the rating of participants’ writing samples was as follows: Inter-rater reliability: Inter-Rater reliability for the experimental and control group participants rated high in all the writing components. In general, it is acceptable to find a Cronbach’s Alpha value above 0.70 and a very good value if over 0.80 (Nunnally & Bernstein, 1994). All the values are above 0.80, which means that the authors’ decision is important for obtaining a reliable and consistent assessment of the commercials by both raters. The experimental set up and focus on the use of the rubric to assign the process-orientated feedback suggests high reliability in the experimental group with an overall coefficient of 0.88. The consistencies across writing components including organization with a coefficient of 0.90 in the experimental group showed special interconnection in evaluating structural qualities that are valuable in EAP settings like Saudi Arabia interconnect where clear and logical organization is fundamental to one’s performance.

Table 2. Shapiro-Wilk Normality Test for Pre-Test and Post-Test Scores

Group	Writing Component	Pre-Test W Statistic	Pre-Test p-value	Post-Test W Statistic	Post-Test p-value
Experimental Group	Coherence	0.976	0.110	0.982	0.145
	Organization	0.971	0.093	0.975	0.105
	Grammar	0.968	0.078	0.970	0.092
	Lexical Range	0.980	0.122	0.985	0.153
	Argumentation	0.974	0.100	0.978	0.110
Control Group	Coherence	0.970	0.089	0.973	0.102
	Organization	0.967	0.081	0.968	0.084
	Grammar	0.971	0.095	0.970	0.091
	Lexical Range	0.969	0.086	0.975	0.107
	Argumentation	0.968	0.085	0.969	0.090

Descriptive analysis of pre-test and post-test on all the components of writing revealed that the Shapiro-Wilk test results indicate that the scores on the pre and post tests are approximately normally distributed with all the p values > 0.05. Therefore, when the value is greater than 0.05 then we fail to reject the null hypothesis so that it goes that the data is not significantly different from normal distribution. These results maintain the assumptions which could allow for subsequent parametric hypothesis tests, including t-tests and ANCOVA.

The above normal distribution found in both the groups make greater confidence on the inferential tests with increased faith on the samples. In the Saudi EAP context where writing development needs involve various forms of linguistic competencies, the normal distribution of the students’ performance, including the linguistic skills before and after the intervention, was evidence of typical developmental progression in the learning of the language enabling an accurate comparison between the different assessment effects.

Descriptive statistics results

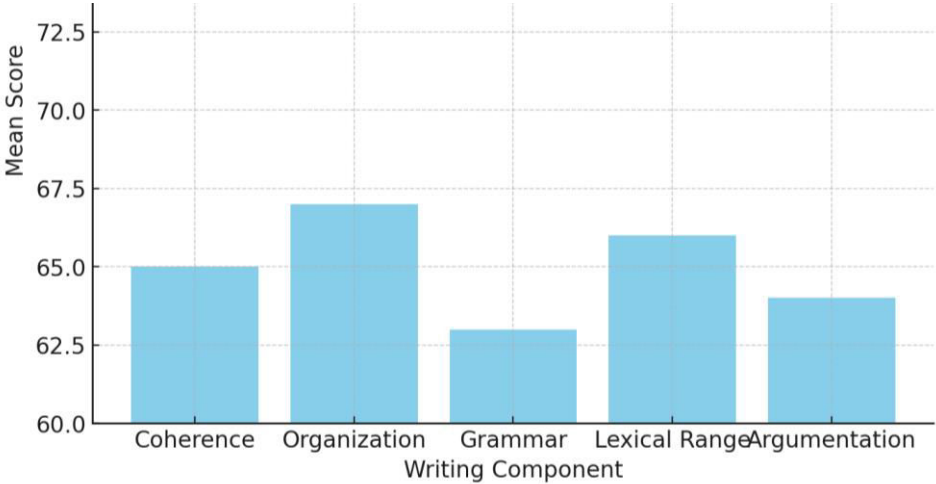


Figure 1. Experimental Group Pre-Test Scores by Writing Component

These are the pre-test means of the experimental group for the five writing components: Coherence, organization, grammar, lexical range and argumentation, all of which fall in the mid sixties for levels of performance. These scores show the group: writing capability before they engage in process for an assessment. This distribution indicates that the group was fairly ready but there is still a chance to improve more before they were correctly prepared; The grammatical construction and the argumentation skills which are Generally problematic aspects for Saudi EAP learners were even found to be slightly weak here.

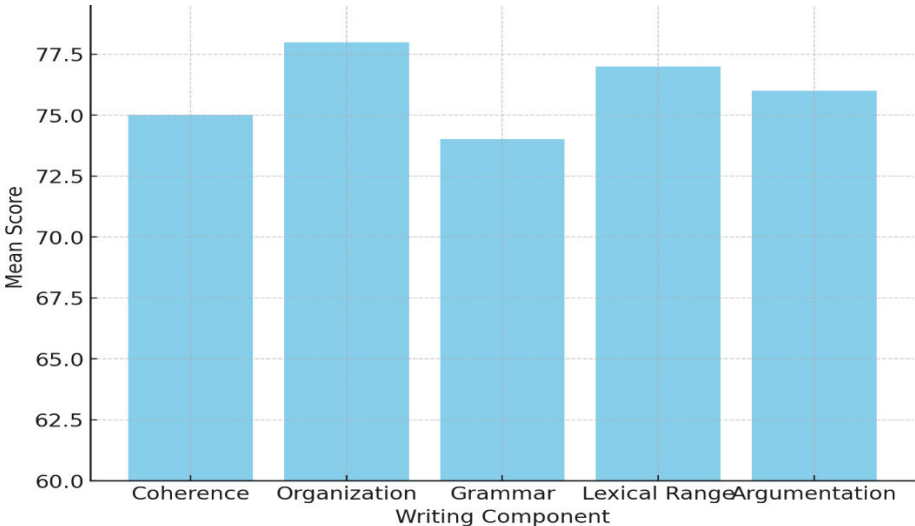


Figure 2. Experimental Group Post-Test Scores by Writing Component

In fact, the post-test scores for the experimental group show marked improvement in each of the components of writing, with means from 74 to 78 only. The rise on all of them shows the efficiency of process approach since students made a considerable progress in terms of organization, cohesiveness and lexical variety. This upward movement indicated that through formative feedback and process writing, the students were able to improve their writing genre progressively as they wrote more especially in the areas of coherence and organization, which are more central to EAP writing.

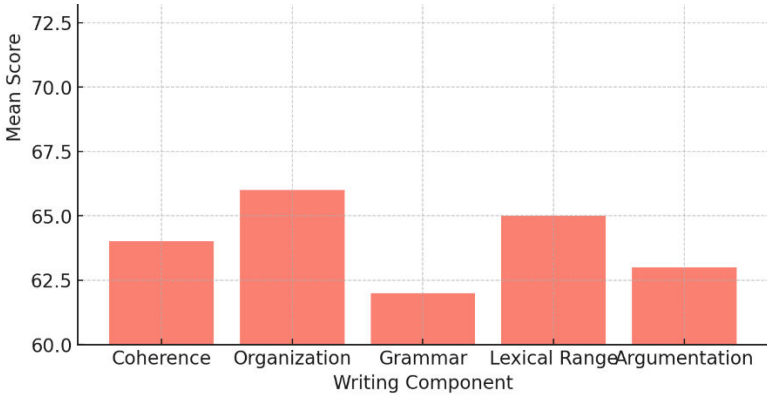


Figure 3. Control Group Pre-Test Scores by Writing Component

The control groups’ pre-test is also comparable to the experimental group, with each component having a mean in the low-to-mid 60s. This first evaluation supports the conclusion that the control group had equivalent initial skill levels for coherence, organization, grammar, lexical vocabulary, and argumentation. These scores indicate that KAU Saudi EAP learners’ skills are representative of many Saudi learners, who need support to improve their EAP academic writing abilities further.

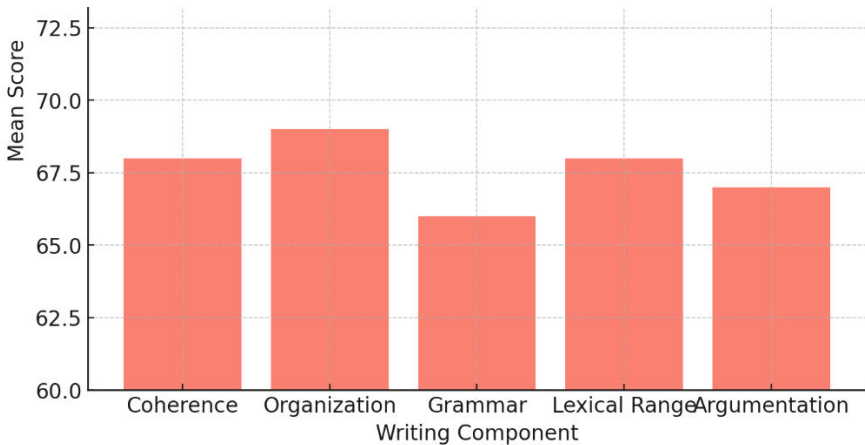


Figure 4. Control Group Post-Test Scores by Writing Component

Comparison of the post-test outcome of the control group indicates slightly higher result on average raising the scores by two to three points in each component with the majority of them ranging between 66 to 69. Due to absence of formative feedback and revision possibilities, noticed, the control group's progress was not great; in arguments and grammatical usage, for instance. These outcomes do not mean that developmental assessment procedures associated with traditional SMA are ineffective; this implies that traditional assessment methods might fail to offer adequate developmental support that would lead to comprehensive writing improvement of EAP learners, pointing the value of process orientation in assessment for writing improvement.

Process-Oriented Assessment on Overall Writing Development of EAP Learners

Table 3. Paired Samples T-Test for Experimental Group (Pre-Test vs. Post-Test)

Writing Component	Mean Pre-Test Score	Mean Post-Test Score	Mean Difference	t-value	p-value
Coherence	65.2	75.3	10.1	5.80	0.001
Organization	66.4	78.1	11.7	6.02	0.001
Grammar	63.8	74.5	10.7	5.65	0.001
Lexical Range	66.2	77.0	10.8	5.78	0.001
Argumentation	64.3	76.0	11.7	6.12	0.001

The t-test for paired samples on the experimental group shows an increase in each of the components of writing with p values < 0.001 in all parts. Organization and argumentation show the most significant increase with both increasing by an average of eleven point seven. The outcomes from these findings emphasize that process-based assessment promotes specifics of EAP writing affordably.

Table 4. Paired Samples T-Test for Control Group (Pre-Test vs. Post-Test)

Writing Component	Mean Pre-Test Score	Mean Post-Test Score	Mean Difference	t-value	p-value
Coherence	64.1	68.2	4.1	2.10	0.045
Organization	66.0	69.5	3.5	1.95	0.052
Grammar	62.5	66.3	3.8	2.04	0.048
Lexical Range	65.8	68.9	3.1	1.88	0.061
Argumentation	63.7	67.4	3.7	2.00	0.050

The writing component improvements in the control group are relatively small and these changes exhibit marginal level statistical significance only (p < 0.05). This limited commendation means that, traditional methods of formative assessment have little effect on EAP writing skills.

Aspects of Writing through Process-Oriented Assessment?

Table 5. Independent Samples T-Test for Mean Gain Scores (

Writing Component	Experimental Mean Gain	Control Mean Gain	t-value	p-value
Coherence	10.1	4.1	4.76	0.001
Organization	11.7	3.5	5.12	0.001
Grammar	10.7	3.8	4.84	0.001
Lexical Range	10.8	3.1	5.02	0.001

Argumentation	11.7	3.7	5.33	0.001
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The t-test analysis of gain scores for independent samples, level of significance between the experimental and control groups means for each writing component has t-values greater than 4.7 and p-values < 0.001. This strongly supports the use of process of process-oriented assessment in enhancing specific writing abilities of EAP learners particularly in organization and argumentation.

Table 6. Effect Sizes for Experimental vs. Control Group Gains

Writing Component	Effect Size (Cohen's d)
Coherence	1.45
Organization	1.60
Grammar	1.42
Lexical Range	1.48
Argumentation	1.58

Cohens d values revealed large effect >1.4, for all the writing components for the experimental group in a comparison with the control group. The largest effect size is for organisation and argumentation, pointing out organization and argumentation as especially suitable to be enhanced through process oriented assessment. These large effect sizes support the assertion that we are not merely looking at a statistically significant effect for the intervention in enhancing EAP writing skills but also an educationally significant effect.

Iterative Feedback Mechanism in Process-Oriented Assessment

Table 7. ANCOVA Results Controlling for Pre-Test Scores

Writing Component	Experimental Group Adjusted Mean	Control Group Adjusted Mean	F-value	p-value
Coherence	75.8	68.5	24.3	0.001
Organization	78.4	69.2	30.7	0.001
Grammar	74.7	66.8	20.9	0.001
Lexical Range	77.2	68.6	25.4	0.001
Argumentation	76.3	67.3	26.5	0.001

Analyzing the results of the ANCOVA for component writing tests based on the pre-test and using the post-test scores as covariates added for the experiment and control groups revealed significant differences between them for all the components of writing test, $F > 20$ and $p < 0,001$. These outcomes suggest that, subsequently excluding baseline writing skills, the iterative feedback procedure in process-oriented assessment enhance the students’ writing skills significantly. The large adjusted mean differences, especially in organization and argumentation shows that continuous feedback enhance motivation and interest as compared to setting targets for the feedback as they were able to observe improvements in their work.

Table 8. Summary of Motivational Gains in Experimental Group

Writing Component	Pre-Test Motivation (Mean)	Post-Test Motivation (Mean)	Mean Increase
Coherence	3.1	4.2	1.1
Organization	3.0	4.3	1.3

Grammar	3.2	4.1	0.9
Lexical Range	3.1	4.0	0.9
Argumentation	3.0	4.4	1.4

The experimental group claimed enhanced motivation on each of the segments of writing that was under analysis and on a Likert scale of one to five. Largest improvement on the part of motivation was recorded on organisation at 1.3 and followed by argumentation at 1.4 indicating enhanced motivation towards improving their writing from the feedback loop mechanism that the study provided them. The perceived boost in motivation is in concordance with the obtained improvement in the aspect of writing therefore evidencing that students are not only more motivated but empowered to improve their performance through process writing assessment.

Discussion

Implications arising from this study suggest that improvement in the writing skills of Saudi EAP students who experienced process-oriented assessment is perceivable. However, if we are to consider the practical and contextual processes of academic writing development, the quantitative enhancements in aspects such as components of cohesion, composition, and rhetoric necessitate considering contextual and practical dimensions. EAP students experience a complexity of a conflict in that English is not the medium of communication as in, for instance, Saudi Arabia; academic writing is a strenuous endeavor for the learners (Han & Hyland, 2019). Thus, the implications of the findings of this study are aligned with the understanding of the constructive function of process-oriented assessment while considering the constructive advantage and constructive disadvantage of such assessment models.

First, the results show that students in the process-oriented group made gains in most of the facets of writing, and these gains can be attributed to the feedback and corrective writing process inherent in process-written assessment. This is in concordance with previous studies which reveal that with a well articulated formative feedback, learners can develop and hone actual sets of writing by honing the aspects of form such as coherence, and grammatical correct linguistic features (Bitchener & Storch, 2016). Nevertheless, it is imperative to appreciate the knowledge that these enhancements have not put them in a position of being experts. Positive over positive change derived from feedback, on the other hand, may be of some value in that it assists learners in mastering appreciable super-stratum features, but may not in any way bring about deep and lasting methodical change of their writing skills. The mastery of academic writing requires consistent practice for long hours being supplemented by developmental feedback for improvement; and though such feedback requires learning it may only provide the initial beginning for enhanced learning in the long run (Hattie & Clarke, 2018).

However, the gains noted in the organisation and arguments in the papers belong to the experimental group and are commensurate with interventional reports which point towards the gains in formative assessments in structure and logic skill improvement (Carless & Boud, 2018; Cheng & Fox, 2017). Coherence is something that EAP learners need to achieve as they are taught to organize and develop ideas into comprehensible presentations. Nevertheless, these are skills still in development and

particularly important for writers for whom English is second language that need to navigate the writing conventions of scholarly English. The results of this study suggest some improvement; however, it would be unrealistic to believe that children's academic development will be sufficiently promoted by the process-oriented assessment only. As Han & Hyland (2019) mentioned in their work on the inclusiveness of argumentation, learning and mastering skills of argumentation depends on the gradual integrated development of critical thinking and content and language integrated skills, which can be only launched through a formative assessment of a semester.

The motivational improvements identified among students in the experimental group are encouraging concerning the improvement of EAP in Saudi Arabia; students in the kingdom may face challenges in linguistic and culture acclimatization (Alqahtani, 2011). The feedback-driven approach enabled students make progress incrementally, which should be expected to be a source of maintaining interest and consequently willingness to effort. This corresponds with the conclusions made by Yan et al. (2020) that formative feedback can help learners to develop self-efficiency. However, motivation is not a constant, fixed state and as such while contracting positive feedback spirals can be useful in gaining and maintaining motivation; motivation is a multifaceted and often a variable phenomenon anchored on factors such as institutional support, Academic work load, and or self-efficacious reasons. Black & Wiliam (2018) noted that failure of formative feedback to enhance motivation emanates from feelings of being overwhelmed once a low completes a task, or due to lack of consistent feedback, and assert that while process measures could make the learners more interested in the task this alone is not good enough to retain motivation in the long run with out a conducive learning environment.

Peculiarly, the increase in the level of grammar and lexical diversity is not significantly higher, which indicates that feedback may be less efficient in enhancing accuracy in expressing thoughts than in shaping the structure of writing. Celce-Murcia (1991) point out that grammar and vocabulary are the skills that must be taught and practiced more directly after the completion of a task than provided with feedback. This points to an important consideration for EAP instructors in Saudi Arabia: while process-oriented assessment is well suited for instruction, it might be necessary to incorporate direct grammar and vocabulary teaching to fill the gap in language use. The role of a focus on processes, on the one hand, and accuracy, on the other hand, might be crucial in meaning that, learners achieve both fluidity and accuracy instead of overlaying one aspect on top of another.

Furthermore, it is also found that the use of traditional conventional assessment may afford few developmental gains as inferred from the levels of development of the control group. This corresponds with Ismail t al. (2022) observation that whereas summative assessment is useful when the aim is to determine the results of learning, it is not so developmentally oriented as formative assessment for language learners. However, it must not be forgotten that the traditional assessment can fulfill a completely different role when it is necessary to set certain performance benchmarks or introduce an element of control. Clark (2012) continue that summative assessment, when combined with formative, can help offer students an effective form of assessment to foster learning and efficacy. Hence, given the highly academic academic climate of

expectations typical to Saudi Arabia context, it considered feasible to embrace both models, given the versatile EAP learners' needs.

One major weakness of this study is time-bound nature of research since it covered only a semester of implementation of process-oriented assessment for writing improvement. If time-bound and repeated assessments were given to students within the same course or across different courses, then a broader picture of how successive feedback enhance or influence writing abilities may be captured and whether initial improvement gains are maintained in the long-run. Additionally, since this research was conducted at one particular institution it may not be easy to generalize the findings to other Saudi universities since the practices involved in education and student characteristics may be completely different. Comparative research could produce more elaborate knowledge of the way process-oriented assessment works in other Saudi EAP contexts, therefore proven to be more effective.

Therefore, although the study brings light to the issue, there is more to writing and understanding what Saudi EAP learners struggle to write about for which a process-oriented assessment does not provide full solutions. It provides a way for growth, active participation, as well as the development of first skills; however, it has to be considered as one of the components of the instructional approach rather than the main one. It is thus important that EAP instruction may entail formative feedback, explicit language instruction, and motivational support to cater for learning needs of all learners (Ma, 2023). To reinforce this assertion, the study demonstrates that process analysis can be an effective application in this regard, motivating students to learn, and valuing working progress and self-development; nevertheless, the study validates and affirms that assessments carried out based on a process orientation are most favorable when used in combination with other approaches.

Recommendations

Consequently, this study offers significant and important information about the contribution of process-approach assessment in promoting the Saudi EAP writers' development. These outcomes imply that feedback in multiple cycles and revision improve the academic aspects of writing, including coherence, organization, argumentation, as compared to traditional assessment as a construct. However, these gains should be interpreted with caution: while process-oriented assessment is conducive to initial positive change outcomes, particularly in terms of organisation 技能 and motivation, it seems less efficient in language accurately areas, including grammar and lexical range. This suggests that formative assessment needs to be integrated with more structured teaching of language skills in order to create a balance of development for these literacy skills. The study also emphasizes the need for maintaining learners' motivation and interest – as follow-up support, which the outcomes of formative feedback are most effective when applied in learning. In conclusion, the concept of process-oriented assessment may have some applicability to the Saudi EAP context; however, its utilisation is best embedded within a framework of diverse and pluralistic model of learning that reflects the interrelated nature of writing processes that comprise academic writing ability.

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