

Process-Genre Approach: Iranian EFL learners' Argumentative Writing as an Example

Reihaneh Sheikhy Behdani *, Roghayyeh Pour Ahmad Moghaddam

Department of English Translation, Lahijan Branch, Islamic Azad University, Lahijan, Iran

Received on: 28-8-2023

Accepted on: 24-10-2023

Abstract

Comparing the effect of implementing process versus process-genre approach on Iranian EFL students' argumentative writing was the primary aim of the study. Three discourse features were selected for analysis (i.e., organization pattern, coherence, and cohesion). In a quasi-experimental design, ninety-two EFL learners (from a subject pool of 117) were selected based on the BABEL test at upper-intermediate level in the age range of 18-36. The chosen participants were randomly allocated to an experimental group (N = 47) given process-genre approach instruction and a control group (N = 45) that was instructed utilizing the process approach. Then, two post-tests were taken: one right away and the other later. The results showed that the distinction between the two groups regarding three discourse features was statistically significant and the effects of process-genre approach retained in delayed post-test. The findings suggested that the integration of genre with writing processes can enhance Iranian EFL learners' argumentative writing. The pedagogical implications of the study are also discussed.

Keywords: Argumentative Writing, Coherence, Cohesive devices, Organization patterns, Process-Genre Approach.

1. Introduction

The pedagogy developed in English-speaking countries has had an impact on writing instruction in EFL contexts. (You 2004; Zhang 2016). However, different approaches to writing instruction have been developed by teachers in EFL contexts, focusing on either language development or writing ability. In product approach, as the first approach to writing, linguistic knowledge (i.e., vocabulary, syntax, and cohesive devices) is considered as the building blocks of writing (Pincas 1982). As Badger and White (2000) stated, writing, based on product approach, deals with knowledge of language structure. In fact, the imitation the teachers' texts, which serve as input, is what leads to writing development.

On the contrary, in process approach (PA) to writing, planning and drafting are two examples of linguistic skills which are predominantly dealt with and less importance is given to linguistic knowledge (e.g., grammar and text structure) (Badger and White 2000). PA to writing, according to Badger and White (2000), has a monolithic view to writing, accordingly writing process is the same without

© 2024 JJMLL Publishers/Yarmouk University. All Rights Reserved,

* Doi: <https://doi.org/10.47012/jjml.16.2.3>

* Corresponding Author: reihaneh.sheikhy322@gmail.com

considering the reason underlying a text (purpose), the addressee to whom the text is written (audience), and the way a text is constructed (organization).

Third, genre-based approach (GA), as Hyland (2007) stated, involves exploring the purpose and setting for applying the specific genre for different social purposes. Genre, as defined by Hyland (2007), refers to a collection of writings with comparable discourse characteristics that may be recognized by the community. The learning cycle of GA is described in five major stages including setting the context to investigate the purpose and setting for applying a specific genre, modeling to analyze the discourse features, joint construction to reinforce the organizational pattern, independent construction to monitor the learners' independent writing, comparing to associate different genres for different social purposes (Hyland 2007). Like other approaches, GA suffers from some shortcomings. Underestimating the skills required to produce a text and considering students as largely passive are the negative aspects of GA. Furthermore, the move to GA causes the writers' cognitive processes and mental strategies, emphasized in PA, to be neglected. Additionally, writers' creativity and self-expression are restricted because of prescriptivism and genre knowledge uniformity (Dixon 1987; Freedman 1994; Hyland 2014). As the result the abovementioned shortcomings, a new approach to writing instruction was formed which involved the positive aspects of PA and GA.

With the paradigm moving beyond the dichotomies of PA and GA in recent years, researchers are increasingly considering the two as complementary rather than competing approaches (Badger and White 2000; Deng et al. 2014; Racelis and Matsuda 2013, Yayli 2011). Rather than swinging to either grammar and conventional genre training or the self-discovery writing process, the PGA adopts an eclectic view, employing the strength of both genre- and process-focused approaches. It also enables learners to recognize the connection between language forms and communicative goals of a specific genre while they go through the recursive procedure of pre-writing, drafting, revising, editing, and publishing (Deng et al. 2014).

Although many studies suggested PGA in EFL writing classes and reported its positive effect on EFL learners' writing development, the application of PGA in the real classrooms seems difficult for EFL language instructors (Racelis and Matsuda 2013). Therefore, the existing literature, pedagogically, give little information on how the PGA can be applied in Iranian EFL context. That is, the potential effect of PGA on the Iranian EFL learners' argumentative writing in terms of putting their ideas into a coherent logical form and learning how to meet the basic requirements of developing an argumentative text such as gathering enough evidence from different opposing sources, evaluating and critically analyzing them and presenting them through a sound organization remained underexplored in Iran. To deal with this gap, the present study intends to demonstrate a pedagogical framework for enhancing EFL students' writing performance. Unlike other studies which focused on narrative and expository writing, the current study intends to investigate the effect of such approach, as a synthesis of genre and process, on argumentative writing, as one of the challenging genres for EFL writers. Moreover, contrary to the previous studies which mostly focused on linguistic features, the researchers of the present study examined the students' writing in terms of organization, coherence, and cohesion, as essential components in standard tests such

as TOEFL or IELTS writing test, after undertaking PGA in comparison with PA. The findings of the present study is important in figuring out the students' potential problems in discourse features while developing an argumentation. Along the same line, the educational staff may also benefit from this study since the findings would help them to modify their instruction strategies, assessment tools, and curricula for writing. Therefore, the researchers set out the following research questions.

1.1 Research Questions

1. Is there any significant difference in the argumentative writing of experimental and control groups?
2. Do organizational patterns vary across implementing PA and PGA?
3. Is there any significant difference in coherence between the experimental and control groups?
4. Do experimental and control groups differ in applying cohesive devices?

2. Literature Review

There are three major approaches to L2 writing instruction including: product, process, and genre. The product approach to writing emphasizes on grammar (Kaur 2015; Lefkowitz 2009; Wingate 2012; Yasuda 2015; You 2004; Zhang 2016). It considers writing as the knowledge about the language structure and primarily sees writing skill as the result of replicating the same pieces of data (Badger and White 2000). The product approach was given further alternative names including "the-text-based approach" the guided composition" and "the controlled-to-free approach" (Silva 1990). According to growing concern from investigators and composition teachers of ESL, product approach to teaching writing is not capable of helping learners to produce written text, and it undermines students' ability to write creatively (Silva 1990).

Due to the limitations of product approach, PA was proposed and it shifts the focus from linguistic information to writing skill (Badger and white 2000). In fact, it emphasizes planning, drafting, revising, editing, and publishing cognitive processes (Flower and Hayes 1981; Graham and Perin 2007). The process of writing, in PA, ignores what is being written, who is writing, and even the context in which writing happens and the learners are suffering from the way language is structured in novel context (Badger and White 2000; Graham and Harris 1997; Hyland 2003). However, writing, as Tribble (1996) stated, requires information of how and what to write in a new context. Therefore, unlike the static, discrete, and decontextualized nature of product and process approaches to writing, genre-based approach, that considers writing skill as a social activity, was proposed (Clark 2012; Hyland 2007; Paltridge 2013) for the specific audience, context, and purpose or as Connor (2004) contended as purposefully constructed social action. In fact, a genre-based approach gives EFL students a clear understanding of how texts in the target genre are created as well as the reasons underlying various structures in different social contexts (Clark 2012; Hyland 2007; 2014; Paltridge 2013).

Although it interferes with authors' self-expression and creativity (Dixon 1987; Freedman 1994; Hyland 2014) or the writer may induce that the model writings are the only possible forms of academic writing (Dudley-Evans 1997), the genre-based approach gives the writers access to understanding the setting in which writing takes place and the purpose underlying it (Badger and White 2000). To overcome the problem of genre-based approach, a compromised PGA was suggested (See Figure 1) to circumvent

the drawbacks of genre-based approach (Badger and White 2000; Yan 2005). PGA allows learners to examine the relation between purpose and form in a specific genre as they go through the iterative prewriting, drafting, revising, and editing processes. This will improve learners' knowledge of different text types and the composition processes (Yan 2005). With the eclectic PGA, researchers have seen that the two approaches can occur simultaneously (Hyland 2004). It also complies with the complex nature of writing, which considers writing as a socio-cognitive activity (Hyland 2003) in which writers require special skills as well as knowledge of language, contexts, the audience in order to deal with the complex cognitive processes involved in composition.

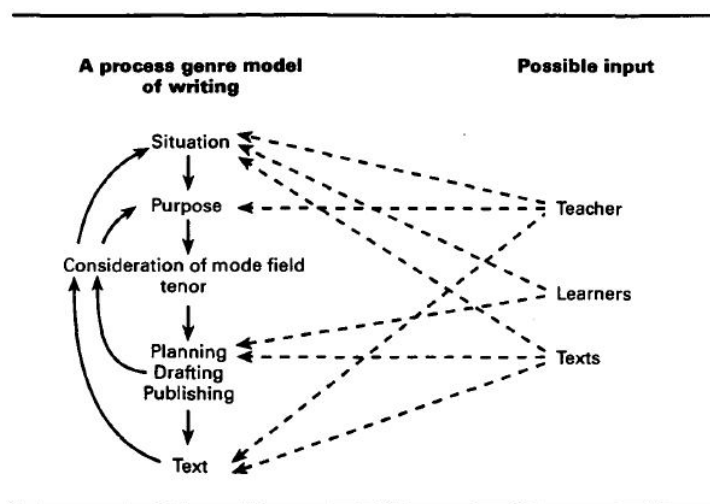


Figure 1: A process-genre model of teaching writing by Badger and White (2000)

Halliday (1994) indicated that the genre part of this approach emphasizes considering the three meta-functions: field which refers to social activity that is happening; tenor that deals with the participants and the relationship they have with each other; and mode as the channel (i.e., oral and written) of communication. More precisely, the field refers to the content of writing, tenor must consider the relation between writer and audience, and mode refers being expressed orally or in the written form (Badger and White 2000; Huang and Jun Zhang 2019). Jarunthawatchai (2010) uttered, because the two approaches explicitly explain both the writing process and the linguistic features of the written texts in relation to the social context of writing, they are likely to be capable of generating a successful second language text in particular social contexts.

2.1. Empirical framework

Many scholars have investigated the effects of process-genre approach on writing. For example, Jarunthawatchai (2010) examined the effects of a process-genre approach on 50 Thai English major students' written texts and genre knowledge acquisition employing a quasi-experimental design. After 15-week intervention, the researchers figured out that process-genre approach developed students L2 writing ability. Portfolio and students' written texts also revealed that students' genre awareness was enhanced.

Although the students were able to realize the social situation, communicative purpose, rhetorical features and language use, the participants were not able to understand the writer-reader relationship.

Deng et al. (2014) also investigated the effects of process-genre approach on 86 Chinese EFL students genre competence in writing in advanced writing classes, utilizing pre- and post-tests, questionnaire, portfolio, and interview. The findings revealed that the students' genre competence and writing ability were enhanced. Moreover, the findings of the in-depth interview with students revealed that students had a positive experience with process-genre approach. Correspondingly, Xu and Li (2018) explored process-genre approach in teaching academic writing to advanced students. The data were taken from students' written tasks, researchers' observation, and interview with the participants. The findings revealed that the process-genre promoted EFL learners' interest in utilizing process writing skill and enhanced their understanding of genre of disciplinary-specific academic writing.

Thongchalerm and Jarunthawatchai (2020), moreover, scrutinized 44 Thai students' writing after receiving a genre-based intervention. The participants took two tests: one for the improvement in linguistic features and one for the potential promotion in writing. The findings revealed an enhancement in both linguistic and writing competence. The researchers also figured out that the participants had a positive attitude toward the instruction (i.e., they viewed genre-based teaching as an effective approach for both their writing performance and genre awareness). Similarly, Rahimi and Jun Zhang (2021), having analyzed the students' narratives, the researcher's reflective journals, and students' pretest and post-test scores, concluded that process-genre approach improved the students' engagement with writing.

Regarding PGA, Wardhana (2022) also examined the effects of process-genre approach on academic writing competence and higher order thinking employing mixed-method explanatory approach. To this aim, 52 Indonesian first-semester students were randomly selected for experimental and control groups. The results indicated that process-genre approach had a positive effect both on students' writing and their higher order thinking. In the same vein, Lan and Anh (2022) conducted a two-cycle critical participatory action research project on 11th grade students at the age of 17, 6 male and 28 females. They were all pre-intermediate students. The data collected from the teachers' journal, questionnaire, and post-tests indicated that students had a significant progress in their expository writing. That is, they gained a better comprehension of the exposition genre and writing process.

3. Method

3.1 Study Design

The present study follows a quasi-experimental design. According to Creswell (2009), in quasi-experimental design, the primary goal is to examine the effect of an intervention on the outcome and control for the other factors that might affect the outcome.

Based on quasi-experimental design, control group (or comparison group, in many cases) does not receive the treatment or receives alternative treatment (i.e., an instruction on PA in the present study) and would typically take the same pre-test and post-test as would the experimental groups, but would not have the same treatment (i.e., PGA in this study) between tests. Thus, participants are given a pretest to ensure

comparability of the participant groups prior to their treatment, and a post-test to measure the effects of treatment (Mackey & Gass, 2006).

3.2 Participants

Ninety-two EFL learners from a subject pool of 117 learners took part in the current study. They were chosen based on convenience sampling. They participated in an online essay writing course. Their mother tongue was Farsi, and they were males and females in the age range of 18-36. To examine the homogeneity of the participants, the researchers used BPT. The learners whose scores were between 55 and 82 (i.e. upper-intermediate level of proficiency) were chosen as the subjects of study. In addition, the selected learners were required to take part in a pre-test of argumentative writing. Three university lecturers rated the learners' final drafts to examine the consistency of the learners' performance in writing. As a result 25 of the learners were eliminated from the study and the rest were positioned in experimental and control groups at random.

3.3 Instrumentation

BPT was utilized to measure learners' language proficiency. The test involves reading prompts, grammatical forms, and lexical items in multiple-choice format. The learners were allotted 60 minutes to answer the questions. To approve the clarity of test instruction, the researchers asked three university lecturers of TEFL to verify its appropriateness. The researchers also piloted the test on 50 EFL learners as the representative sample of the target population. The reliability estimate calculated via KR-21 revealed the high reliability index for the test ($r=.91$).

As the second instrument, the researchers employed a set of writing prompts. Writing prompts, as Kroll and Reid (1994) stated, inspire learners to respond to. The prompts were selected from a genuine website related to the actual IELTS test. Before implementing writing prompts, the researchers evaluated the prompts based on six variables, involving contextual, content, linguistic, task, rhetorical, and evaluation variables introduced by Hamp-Lyons and Henning (1991). To pilot the prompts, the researchers employed them on a group of 20 learners and the writing prompts went through pretest, revise, test, accept/reject procedure. As a result, three prompts were selected for using in the pre-test and two post-tests (one immediate and one with two-week delay). Furthermore, eight topics were chosen for treatment sessions.

The holistic scoring scale used in this study was according to Plakans and Gebri's (2017) scale in order to score coherence and organizational patterns. These scales are ranging from 1 (low) to 5 (high). Seven categories including summary, review/comment, isolated main point, frame, free response, synthesis, and interpretation summary were used to classify organizational patterns (Flower et al. 1990). To determine if the patterns are successfully applied or not, a rating scale of the overall success of the organization is used (appendix A). Since the writers may suffer from inappropriate selection of organization patterns or incomplete pattern (Kantz 1990), the researchers of the current study employed the scale developed by Plakan and Gebri 2017 which considered these two measures as the main concern

of the study. Measuring coherence in the written text is difficult because it is largely related to the reader's interpretation. In this regard, the raters were asked to assess coherence quality regarding one of its elements, which is the logical flow of ideas in the text. The five-level rating scale designed by Plakans and Gebril in 2017 considered the flow of ideas as the main concern to assess coherence (appendix B).

Due to lack of holistic scoring for cohesive markers, the researchers of the current study developed a five-level scale for cohesion based on six cohesion devices which have been introduced as significant variables in previous studies (Crossley and McNamara 2008, 2009, 2012; Crossley et al. 2007; Guo and Crossley 2013; Hinkel 2001). Connectives, logical operators, semantic similarity, anaphor reference, argument overlap, and stem overlap make up the variables (appendix C). Then, two raters used the scale to rate 370 essays. The inter-rater reliability was 0.83, $p < 0.001$.

Table 3.1: Cohesion Scale

Score	Descriptor
1	limited range of cohesive markers, no logical relationship between ideas
2	basic use of cohesive markers- inaccurate, repetitive, lack of referencing or substitution
3	mechanical use of cohesive devices, in cases faulty use of markers
4	appropriate use of cohesive markers-in cases overuse of markers
5	effective use of cohesive markers-wide range of markers, appropriate without attracting attention

3.4. Procedure

The present study was conducted in 2020-2021 and due to the Corona Virus pandemic, the study was implemented through an online writing course. One-hundred and seventeen EFL learners enrolled for taking part in the course. BPT was used in order to select the desired subjects with upper-intermediate level of proficiency. As a result, ninety-two learners were chosen as the subjects of the present study. Next, the participants were supposed to take a pre-test of writing to ensure the homogeneity of the participants in writing skill. The maximum amount of time for the pre-test was about 60 minutes. Subsequently, at random the participants were split into two groups: control and experimental. The experimental group took a class on argumentative writing using the PGA instruction whereas the control group received PA instruction.

The major goal of PA was to put more emphasis on writing processes instead of the final product; namely, planning, translating, reviewing, and monitoring (Flower and Hayes 1981). The treatment was done in 8 sessions during 8 weeks. Initially, the members of the control group were supposed to brainstorm a network of ideas in the form of single words or phrases. The planning stage involved some sub-processes including generating ideas through which the learners retrieved relevant pieces of information from long-term memory (in cases fragmentary, unconnected, or even contradictory pieces of data); organizing ideas in which they gave a meaningful structure to the ideas by grouping ideas and forming new concepts; searching for superordinate and subordinate ideas and identifying the most and least important pieces of information; goal setting as an ongoing and moment-to-moment process through which the learners integrated content and purpose. In the second stage, translating, the learners were required to put the ideas into written form and wrote initial drafts and elaborated the ideas. For reviewing, as the third step, the learners dealt with two sub-processes including evaluating and revising. In fact, in reviewing step, the learners read the written text for further translating or systematically evaluating and

revising the text. By monitoring, the writers moved from one process to the next based on goals and styles of writing and if there were any deviation from the goals, the writer deleted or made the necessary correction.

The experimental group, on the contrary, went through the four steps of the PGA including building the context, deconstructing the model texts, joint, and independent construction. To examine the social context of the intended genre, the researchers first built the context in which genre, tenor, and mode were used. The social context of the text, the social activity in which it was generated, the participants' interaction in the communicative event, and the means by which communication was achieved were all considered to be part of the social context. In the second step, the researchers focused on deconstructing the model texts in which the learners were motivated to find out the discourse structures and language characteristics of the target text. The researchers invited the students participate in group discussions to identify the genre's common traits and understand how the language in the model text was chosen and organized to achieve the study's communicative objectives. In addition, this stage involved learner-led activities to let the learners become familiar with the features of argumentative writing (i.e., introducing the topic, developing the claims, refuting opponents' arguments, and concluding the topic). During the joint construction process, the researchers and learners cooperated with each other to construct a sample text and the researchers guided them systematically to employ the genre awareness in brainstorming, planning, translating, reviewing and monitoring processes. The researchers, in fact, took the role of "facilitator" (Hyland 2004), leading learners "through all stages of preparation and drafting process, explicitly discussing and negotiating the meaning they are making" (Feez 2002, 66). The students were divided into small groups to create comprehensive illustrations of the genre in order to improve their writing. By gaining genre awareness at the previous level, the students' focus was shifted to developing ideas to specific contexts considering "real and simulated audience" (Hyland 2011, 32) and the specified communicative goal. At the independent construction phase, students wrote text on their own using their prior knowledge of the context, textual elements, and writing processes. Although the learners approached the subject differently, they were inspired to use their writing skills and genre knowledge in their writing.

After eight sessions of treatment, both groups took a post-test in about 60 minutes. They had to compose an argumentative text in at least 250 words. Writing assessment was done according to Plakan and Gebriil's (2017) scale regarding coherence and organizational patterns in the text. Due to the lack of proper scoring scale for cohesion, a five-level rating scale was proposed on the basis of 6 cohesive markers by researchers. The researchers evaluated the texts based on the five-level rating scale regarding coherence, cohesion and organizational patterns. A delayed post-test was given to students eight weeks after the post test was implemented in order to evaluate their performance. Subsequently, scores of both groups were submitted into SPSS for data analysis.

4 Results

4.1 The Result of the Language Proficiency Test

To homogenize the participants, the researchers used BPT. Table 1 shows that the BPT's mean and standard deviation were 83.52 and 4.8, respectively. Randomly, 92 participants were divided into two groups: a control group (N= 45) and an experimental group (N = 47). The researcher then establishes that the two allocated groups were homogeneous before the treatment began.

Table 1: The Descriptive Statistics of the BPT

	N	Minimum	Maximum	Mean	Std. Deviation
proficiency	92	70.00	90.00	83.5217	4.80951
Valid N	92				

The normality test of Kolmogorov-Smirnov demonstrated that the experimental group's data are not normally distributed ($p < .05$). In order to compare the results, the Mann-Whitney U test should be utilized.

Table 2: The Descriptive Statistics for the Comparison of the Control and Experimental Groups as to Their Language Proficiency

	Group	N	Mean	Std. Deviation	Std. Error Mean
proficiency	control	45	83.2889	4.96635	.74034
	experimental	47	83.7447	4.69722	.68516

The calculated mean and standard deviation scores of control and experimental groups are 83.28, 4.96 and 83.74, 4.69, respectively. Below is the inferential findings for group comparison.

Table 3: The Result of the Inferential Test for the Comparison of the Control and Experimental Groups as to Their Language Proficiency

	Language proficiency
Mann-Whitney U	1008.500
Wilcoxon W	2043.500
Z	-.384
Asymp. Sig. (2-tailed)	.701

The linguistic proficiency of designated control and experimental groups was homogeneous, as shown in Table 4.3 ($U=1008$, $p = .05$).

4.2 The Result of Inter-Rater Reliability

To find whether there was agreement between the two raters, they were asked to score 20 participants' writing in a pilot study. The reliability analysis is displayed in the Table below.

Table 4: The Inter-Rater Reliability for the Two Raters in a Pilot Study

Title	N of Raters	R	Sig
Coherence	2	.901	.000
Cohesion	2	.881	.000
Organizational Patterns	2	.880	.001

The results of a pilot study, including two raters and 20 participants, demonstrated significant levels of agreement for the coherence ($R = .90$, $P < .05$), cohesion ($R = .88$, $P < .05$), and organizational patterns ($R = .88$, $P < .05$).

4.3 Answering the First Question

Before testing the first research hypothesis, the researchers checked the normality of the data distribution for the pre-test, post-test, and delayed test scores. The normality of data distribution was not confirmed ($P < .05$). The non-parametric Mann-Whitney U test was used to compare the outcome of the two groups, the researchers utilized the.

Table 5: The Descriptive Statistics for Writing Scores of the Two Groups

	N	Minimum	Maximum	Mean	Std. Deviation
ConPret	45	4.00	11.00	6.8000	1.85374
ExpPre	47	4.00	11.00	6.7660	1.77192
ConPost	45	5.00	12.00	7.3778	1.65542
ExpPost	47	6.00	15.00	10.0213	2.43605
ConDelayed	45	4.00	11.00	7.1333	1.70027
ExpDelayed	47	6.00	14.00	9.6596	1.85656
Valid N	45				

Table 5 shows the mean scores for control group's pretest (=6.80) and the experimental group's pretests (=6.76); the mean scores for control and experimental group's post-tests (7.37 and 10.02); and the mean scores for control and experimental groups' delayed tests (7.13 and 9.65, respectively).

Table 6: Result of the Inferential Test for the Comparison of the Argumentative Writing Scores

	Pre-scores	Post-scores	Delayed-scores
Mann-Whitney U	1040.500	401.500	330.500
Wilcoxon W	2168.500	1436.500	1365.500
Z	-.136	-5.169	-5.742
Asymp. Sig. (2-tailed)	.892	.000	.000

On their pretests, there was no difference between the two groups, but a statistically significant difference between the post-tests was discovered ($U = 401.50$, $p < 0.05$) and delayed tests ($U = 330.50$, $p < 0.05$) of the two groups. Consequently, the first null hypothesis was disproved.

4.4 Answering the Second Question

The researchers examined the normality of the data distribution for the pretest, post-test, and delayed test scores using a One-Sample Kolmogorov-Smirnov test.

The normality of data distribution was not verified ($P < .05$). In order to compare the scores of the two groups, the researchers utilized the non-parametric Mann-Whitney U test

Table 7: The Descriptive Statistics for the Organizational Patterns Scores

	N	Minimum	Maximum	Mean	Std. Deviation
ConPre_OP	45	1.00	3.00	1.6444	.60886
ExpPre_OP	47	1.00	3.00	1.7660	.63289
ConPost_OP	45	1.00	4.00	1.8667	.72614
ExpPost_OP	47	2.00	5.00	3.0426	.83295
ConDelayed_OP	45	1.00	3.00	1.8000	.69413
ExpDelayed_OP	47	2.00	4.00	2.8511	.58898
Valid N (listwise)	45				

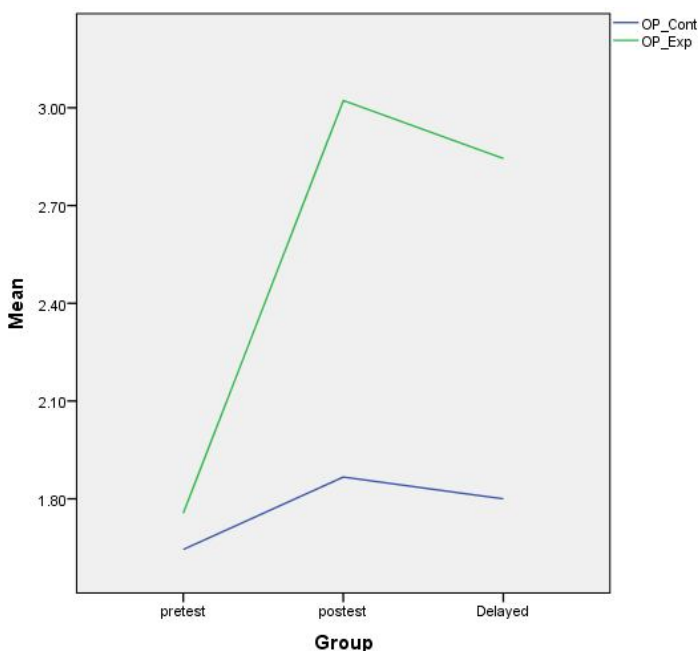
Process-Genre Approach: Iranian EFL learners' Argumentative Writing as an Example

Control and experimental groups' respective mean scores for pre-tests are 1.64 and 1.76: control and experimental groups' post-test mean scores are 1.86 and 3.04, respectively; and control and experimental groups' respective mean scores on the delayed post-tests are 1.80 and 2.85.

Table 8: Result of the Inferential Test for the Comparison of the Organizational Patterns Scores

	Prescores	Postscores	Delayed scores
Mann-Whitney U	952.500	336.500	321.000
Wilcoxon W	1987.500	1371.500	1356.000
Z	-.921	-5.923	-6.135
Asymp. Sig. (2-tailed)	.357	.000	.000

The Mann-Whitney U test showed that the two groups did not differ on their pretests, but there was a statistically meaningful difference between the post-tests ($U= 336.50, p < 0.05$) and delayed tests ($U= 321, p < 0.05$) of the two groups. As a result, the second null hypothesis was rejected meaning that organizational patterns differed significantly across implementing PA and PGA. The difference in organization patterns between control and experimental groups are shown in the following graph.



Graph1: The difference in organization patterns between control and experimental groups

4.5 Answering the Third Question

The researchers employed a One-Sample Kolmogorov-Smirnov test to check whether coherence differed across implementing PA and PGA. The normality of data distribution was not confirmed ($P<.05$). So to compare the scores of the two groups, the non-parametric Mann-Whitney U test was employed.

Table 9: The Descriptive Statistics for the Coherence Scores

	N	Minimum	Maximum	Mean	Std. Deviation
ConPre_Coherence	45	1.00	4.00	2.3111	.87444
ExpPre_Coherence	47	1.00	4.00	2.3617	.67326
ConPost_Coherence	45	1.00	4.00	2.4444	.69267
ExpPost_Coherence	47	2.00	5.00	3.5319	.90532
ConDelayed_Coherence	45	1.00	4.00	2.3556	.74332
ExpDelayed_Coherence	47	2.00	5.00	3.4255	.71459
Valid N (listwise)	45				

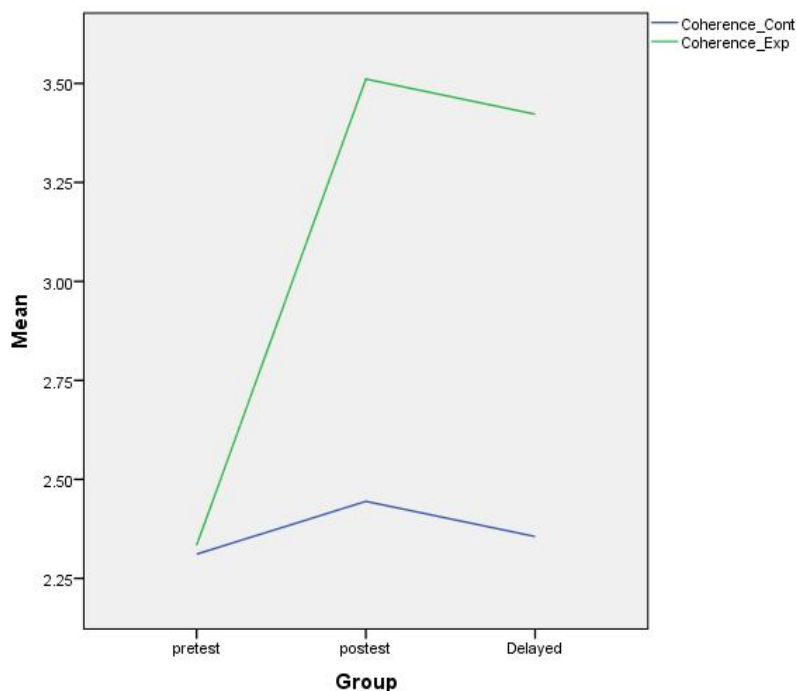
The mean score for the pretests of control group is 2.31, and for experimental group is 2.36; the mean scores for the post-tests of control and experimental groups are 2.44 and 2.53, respectively; and the mean scores for the delayed tests for control (=2.35) and experimental groups (=3.42) are calculated.

Table 10: Result of the Inferential Test for the Comparison of the Coherence Scores

	Pre-scores	Post-scores	Delayed-scores
Mann-Whitney U	1047.000	396.000	349.000
Wilcoxon W	2082.000	1431.000	1384.000
Z	-.089	-5.441	-5.891
Asymp. Sig. (2-tailed)	.929	.000	.000

The pre-tests for the two groups did not differ significantly from one another according to the Mann-Whitney U test, but a statistically meaningful difference between the posttests was found ($U= 396$, $p < 0.05$) and delayed tests ($U= 349$, $p < 0.05$) of the two groups. Thus, the fourth null hypothesis was rejected, which means that coherence differed significantly across implementing PA and PGA. The graph below illustrate the difference between the two groups

Process-Genre Approach: Iranian EFL learners' Argumentative Writing as an Example



Graph 2: The difference in coherence between control and experimental groups

4.6 Answering the Fourth Question

The researchers conducted a One-Sample Kolmogorov-Smirnov test to check whether there was normality of the distribution for the pretest, post-test, and delayed test scores investigate whether cohesion differed across implementing PA and PGA. The normality of data distribution was not confirmed ($P < .05$). To compare the findings of the two groups, the nonparametric Mann-Whitney U test was utilized.

Table 11: The Descriptive Statistics for the Cohesion Scores

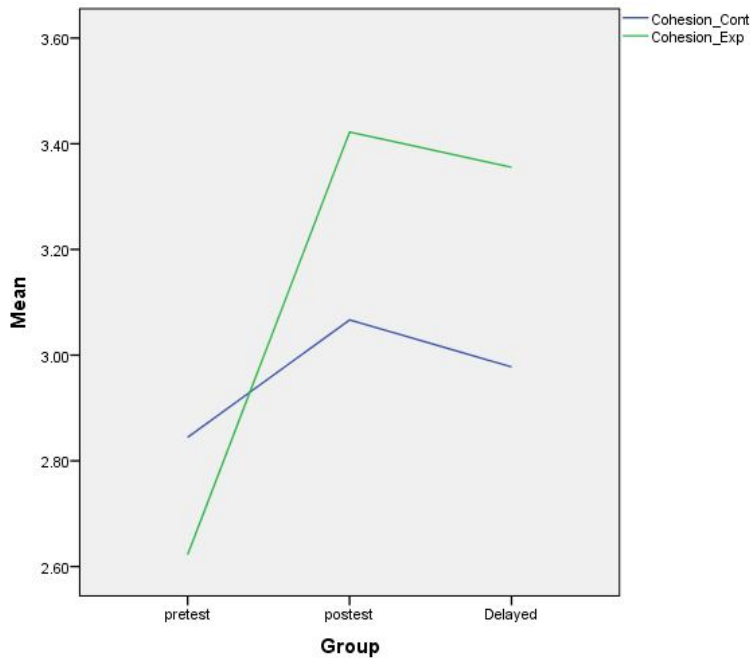
	N	Minimum	Maximum	Mean	Std. Deviation
ConPre_Cohesion	45	2.00	4.00	2.8444	.60135
ExpPre_Cohesion	47	2.00	4.00	2.6383	.67326
ConPost_Cohesion	45	2.00	4.00	3.0667	.57997
ExpPost_Cohesion	47	2.00	5.00	3.4468	.85487
ConDelayed_Cohesion	45	2.00	4.00	2.9778	.54309
ExpDelayed_Cohesion	47	2.00	5.00	3.3830	.79545
Valid N (listwise)	45				

The mean scores for the pre-tests of control and experimental groups are 2.84 and 2.63; the mean scores for the post-tests of control and experimental groups are 3.06 and 3.44; and the mean scores for the delayed tests for control and experimental groups are 2.97 and 3.38, respectively.

Table 12: Result of the Inferential Test for the Comparison of the Cohesion Scores

	Pre-scores	Post-scores	Delayed-scores
Mann-Whitney U	864.500	784.500	743.000
Wilcoxon W	1992.500	1819.500	1778.000
Z	-1.679	-2.349	-2.748
Asymp. Sig. (2-tailed)	.093	.019	.006

The Mann-Whiney U test showed that the two groups did not differ on their pretests, but there was a statistically meaningful difference between the post-tests ($U= 784.50, p < 0.05$) and delayed tests ($U= 743, p < 0.05$) of the two groups. Therefore, the third null hypothesis was rejected meaning that cohesion differed significantly across implementing PA and PGA. The graph below reveals the difference between the two groups:



Graph 3: The difference in cohesion between control and experimental groups

5. Discussion

The current study's main goal was to juxtapose the effects of PA compared to PGA on the enhancement of learners' argumentative writing in Iran. The experimental group received a treatment through PGA, while the control group underwent PA for the same amount of time. At various points in time, the experimental group's writing performance was compared to that of the control group (before, immediately after, and 8 weeks after the treatment).

The first research question investigated if there were any variations in the argumentative writing of the experimental and control groups. According to the findings, the experimental group fared better than the control group. Similarly, Tangpermpoon (2008) revealed that PGA has greater effect than using only one approach. However, the findings contradict with Dovey (2010) who concluded that the learners in a process-based curriculum performed better in writing than those in a genre group. The enhancement of writing in experimental group, as the result of PGA, made the results of the current study consistent with Huang and Jun Zhang (2019) who conducted a research to look into the effects of using PGA for improving learners' argumentative writing in EFL context. Having studied on 72 undergraduate learners,

the researchers concluded that the experimental group (n=40) receiving L2 writing instruction through PGA in comparison with the comparison group (n=32) receiving traditional approach showed remarkable improvement in total performance in both post and delayed post-test and there is little development in the comparison group. Along the same line, Getnet (2019), adopting a quasi-experimental design, ran a research to identify the effects of using PGA instruction on English majoring learners' argumentative writing performance. After 5 weeks of treatment, the researchers evaluated the writers' writing based on Hamp-Lyons' and Henning's (1991) writing scale based on organization, content, argumentation, communicative quality, reference, linguistic accuracy and linguistic appropriateness. The results of the final drafts of post-tests showed development in all of the text-quality traits except linguistic accuracy. In addition, Jarunthawatchai (2010) administered a quasi-experimental research to study the impacts of PGA instruction on learners' writing performance, understanding of genre knowledge and the learners' ability in the writing process. The results indicated that the learners in PGA gained more improvement in all areas of writing such as content, organization, and linguistic appropriateness.

The second research question dealt with the learners' organization pattern in argumentative writing of both experimental and control groups. The analysis of the papers showed that the learners in the experimental group could organize a discussion around a distinct and obvious rhetorical purpose, audience, and context. The findings parallel with Huang and Jun Zhang (2019) who argued that instructors' text analysis and direct instruction of the rhetorical structure enhance the learners' ability to produce well-organized texts. The participants' performance in the control group, in contrast, suffered from inconsistent task representation. For example, although writing task requires argumentation, the body paragraphs used quite different task representation (e.g., description). The findings are congruent with Watanabe (2001) who found that the learners' pattern selection may not adhere to task requirements. This can be due to misinterpretation or as Cummings (1989) and Hinkel (2005) stated as a result of lack of experience with writing patterns. The results also demonstrated that in case the learners in the control group selected appropriate organization pattern, they suffered from incomplete pattern. This echoes Kantz (1990) and Watanabe (2001) who stated that the learners may not be able to complete the pattern successfully.

The third research question explored whether PA in comparison with PGA would improve learners' writing coherence. The results revealed that learners in PGA group gained higher scores in post-test. In fact, the analysis of the papers showed sound use of repetition, pronominal forms and synonyms of the topic used in the preceding sentence, adequate justifying support for claims, and the linked concluding statements to preceding sub-topics. The findings corroborate with what Negretti and Kuteeva (2011) found. They reported that genre analysis increases the meta-cognitive awareness of the learners and gives the learners a "writerly reader" (Hirvela 2004) perspective. That is, learners have a good understanding of discourse community, purpose, audience, rhetorical moves, and structure of the text. The findings are also in line with Cheng (2007) who focused on only one learner and noticed that genre analysis in academic writing helps the learners transfer the generic features they have analyzed in the reading task into their writing and the genre meta-cognitive awareness makes the learners have deliberate writing choices.

The cohesive markers, as the fourth concern of the present study, differed across writing performance in the two groups. That is, the experimental group which received an instruction on PGA outperformed the control group which was instructed based on PA. In the current study, there were two main categories of cohesive markers including 1) connecting words (i.e., connectives and logical operators) 2) repetition (i.e., semantic similarity, anaphor reference, argument overlap, and stem overlap). Although experimental and control groups did not receive any explicit instruction on cohesion, the researchers provided the learners with relevant feedback on the final performance. In the same vein, Huang and Jun Zhang (2019), having investigated the effects of PGA on argumentative writing of Chinese learners, concluded that the learners made significant progress in language use, mechanics, and vocabulary. Memari Hanjani and Li (2014) also pointed out that both the local and global aspects of writing and surface issues such as mechanics of writing receive an emphasis from process-genre approach.

6. Conclusion

This quasi-experimental research explored the effects of PA and PGA on students' writing enhancement in EFL writing context. The findings revealed that the use of PGA, in comparison with PA, developed students' writing performance in terms of discourse features.. In fact, the synthesis of process and genre leads to the emergence of process-genre approach which develops language learners' writing skills, linguistic and genre knowledge. The integration of genre with writing processes foster metacognitive development which regulates writing skill and encourages the students to pay attention to the target community, rhetorical motives of choices, and the underlying purpose of the written text in writing processes. As Hyland (2003) stated, "the genre help unite the social and the cognitive because they are central to how writers understand, construct, and reproduce their social realities" (p. 24). The findings of the current study have some pedagogical implications.

Based on the findings of the present study, it can be implied that language teachers should consider both the knowledge of context (genre) and the skills needed for using language (process) in writing courses. That is, the teachers, instead of explaining the components and features of argumentative writing, may help the students comprehend the rhetorical patterns of argumentation through guided analysis of argumentative writing and explicit instruction of the rhetorical structures in the real context. In this regard, Yu (2020) stated that the students' rhetorical knowledge correlates positively with organizational patterns, language knowledge and process knowledge. As a result, the researchers of the present study along with Zhang and Zhang (2021) recommend EFL teachers to teach academic writing genres to EFL university freshmen.

The findings also recommend that new assessment rubrics are needed to not only scrutinize learners' linguistic knowledge and skills but also evaluate the learners' ability in information evaluation and evidence interpretation. As a result, the non-argument genre, inconsistent arguments, and arguments that meet some but not all genre expectations should be detected.

Furthermore, course book designers need to design writing tasks which promote the language learners' awareness in developing an argument. In fact, the course-book designers need to design guided tasks which requires students to find the statements which grab their attention, look for thesis statement, find the sub-claims, figure out the opposing views, recognize the refutation, and realize the main arguments and the restatement of the writers' views. Having analyzed the sample argumentative texts, the course book designers may develop some independent writing tasks which require the students to go through the same procedure and develop an argumentation by themselves.

Like other studies, the present study is not exempt from limitations. The findings of the current study differentiated learners' performance based on PA and PGA in argumentative writing, and cannot claim the same or similar results to other genres of writing. Therefore, it is suggested to other researchers to explore the same approaches in other writing genres. Furthermore, more research is needed to be conducted on PA and PGA in different age range and language proficiency levels.

هل يُحسِّن نهج العملية - المحتوائية الكتابة الجدلية لمتعلمي اللغة من إيران؟ البحث المقارن حول نهج العملية - المحتوائية مقابل نهج العملية

ريحانة شيخي بهداني، رقية بور أحمد مقدم
قسم الترجمة الإنجليزية، فرع لاهيجان، جامعة آزاد الإسلامية، إيران

الملخص

كان الهدف الرئيسي لهذا البحث هو مقارنة تأثير استخدام نهج العملية - المحور والعملية - جانري على الكتابة الجدلية لمتعلمي اللغة. اخترنا ثلاث سمات للخطاب للتحليل (الأنماط التنظيمية والتماسك الدلالي والتماسك الهيكلية). في تصميم شبه تجريبي، واخترنا 92 متعلماً للغة من إيران (من مجموعة إحصائية من 117 شخصاً) بناءً على اختبار BABEL على مستوى متوسط ، بالقرب من مستوى عالٍ في الفئة العمرية من 18 إلى 36 عاماً. قسمنا الأشخاص الذين اخترناهم عشوائياً إلى مجموعة تجريبية (العدد = 47) تم تدريبهم على نهج العملية - جانري ومجموعة التحكم (العدد = 45) الذين تم تدريبهم على نهج العملية - المحور. ثم تم أخذ اختبارين لاحقين منهم: أحدهما فوري والآخر متأخر، وأظهرت النتائج أن الاختلاف بين المجموعتين فيما يتعلق بخصائص الخطاب ذو دلالة إحصائية وأن تأثيرات نهج جانري - عملية كانت دائمة في الاختبار اللاحق المتأخر، كما تظهر النتائج أن الجمع بين جانري وعملية الكتابة يمكن أن يحسن الكتابة الجدلية لمتعلمي اللغة الإيرانية كمتعلمي لغة أجنبية. كما نوقشت النتائج التربوية للدراسة.

الكلمات المفتاحية: الكتابة الجدلية، التماسك الدلالي، أدوات التماسك الهيكلية، الأنماط التنظيمية، نهج العملية - جانري.

References

- Badger, Richard, and Goodith White. 2000. A Process Genre Approach to Teaching Writing. *ELT Journal* 54 (2): 153-160. doi:10.1093/elt/54.2.153
- Cheng, An. 2007. Transferring Generic Features and Recontextualizing Genre Awareness: Understanding Writing Performance in the ESP Genre-Based Literacy Framework. *English for Specific Purposes* 26: 287–307.
- Clark, Irene L. 2012. *Concepts in Composition: Theory and Practice in the Teaching of Writing*. New York: Routledge.
- Connor, Ulla. 2004. Intercultural Rhetoric Research: Beyond Texts. *Journal of English for Academic Purposes* 3, no. 4: 291–304. doi:10.1016/j.jeap.2004.07.003
- Creswell, John W. 2009. *Research design: Qualitative, Quantitative, and Mixed Methods Approaches*. Los Angeles: Sage Publications.
- Crossley, Scott A., Max M. Louwse, Philip M. McCarthy, and Danielle S. McNamara. 2007. A Linguistic Analysis of Simplified and Authentic Texts. *Modern Language Journal*, 91: 15-30.
- Crossley, Scott A., and Danielle S. McNamara. 2008. Assessing L2 Reading Texts at the Intermediate Level: An Approximate Replication of Crossley Louwse, McCarthy & McNamara (2007). *Language Teaching* 41: 409-429.
- Crossley, Scott A., and Danielle S. McNamara. 2009. Computational Assessment of Lexical Differences in L1 and L2 Writing. *Journal of Second Language Writing* 18: 119-135. doi.org/10.1016/j.jslw.2009.02.002
- Crossley, Scott A., and Danielle S. McNamara. 2012. Predicting Second Language Writing Proficiency: The Role of Cohesion, Readability, and Lexical Difficulty. *Journal of Research on Reading* 35: 115-135.
- Cumming, Alister. 1989. Writing Expertise and Second Language Proficiency. *Language Learning* 39: 81-141.
- Deng, Liming, Qiuji Chen, and Yanyan Zhang. 2014. *Developing Chinese EFL Learners' Generic Competence: A Genre-Based and Process-Genre Approach*. New York: Springer.
- Dixon, John. 1987. "The Question of Genres". In *The Place of Genre in Learning: Current Debates*, ed. Ian Reid, 9–21. Australia: Deakin University.
- Dovey, Teresa. 2010. Facilitating Writing from Sources: A Focus on Both Process and Product. *Journal of English for Academic Purposes* 9: 45–60.
- Dudley-Evans, Tony. 1997. "Genre Models for the Teaching of Academic Writing to Second Language Speakers: Advantages and Disadvantages". In *The Functional Approaches to Written Text*:

Process-Genre Approach: Iranian EFL learners' Argumentative Writing as an Example

- Classroom Applications*, ed. Tom Miller, 150-159. Washington DC: United States Information Agency.
- Feez, Susan. 2002. "Heritage and Innovation in Second Language Education". In *The Genre in the Classroom: Multiple Perspectives*, ed. Ann M. Johns, 43-69. Mahwah: Lawrence Erlbaum Associates.
- Flower, Linda, and John R. Hayes. 1981. A Cognitive Process Theory of Writing. *College Composition and Communication* 32 (4): 365-387. doi:10.2307/356600
- Flower, Linda, Victoria Stein, John Ackerman., Margaret J. Kantz, Kathleen McCormick, and Wayne C. Peck. 1990. *Reading-To-Write: Exploring a Cognitive and Social Process*. New York: Oxford University Press.
- Freedman, Aviva. 1994. "Do As I Say': The Relationship between Teaching and Learning New Genres". In *The Genre and the New Rhetoric*, ed. Aviva Freedman, and Peter Medway, 191-210. London: Taylor & Francis.
- Getnet, Achamyelch. 2019. Effects of Process-Genre Approach on Students' Argumentative Genre Performance. *English for Specific Purposes World* 21 (57): 1-10.
- Graham, Steve, and Karen R. Harris. 1997. "Whole Language and Process Writing: Does One Approach Fit All?" In *The Issues in Educating Students with Disabilities*, ed. John Lloyd, Edward J. Kameenui, and David J. Chard, 239-258. Hillsdale: Erlbaum.
- Graham, Steve, and Dolores Perin, D. 2007. *Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High Schools. A Report to Carnegie Corporation of New York*. Washington, DC: Alliance for Excellent Education.
- Guo, Liang, Scott A. Crossley, and Danielle S. McNamara. 2013. Predicting Human Judgments of Essay Quality in both Integrated and Independent Second Language Writing Samples: A Comparison Study. *Assessing Writing* 18: 218-238.
- Halliday, Michael Alexander Kirkwood. 1994. *An Introduction to Functional Grammar*. London, UK: Arnold.
- Hamp-Lyons, Liz, and Grant Henning. 1991. Communicative writing profiles: An Investigation of the Transferability of a Multiple-Trait Scoring Instrument across ESL Writing Assessment Contexts. *Language Learning* 41 (3): 337-373. doi: 10.1111/j.1467-1770.1991.tb00610.x
- Hinkel, Eli. 2001. Matters of Cohesion in L2 Academic Texts. *Applied Language Learning* 12: 111-132.
- Hinkel, Eli. 2005. *Handbook of Research in Second Language Teaching and Learning*. New York: Routledge.
- Hirvela, Alan. 2004. *Connecting Reading and Writing in Second Language Writing Instruction*. Ann Arbor, MI: The University of Michigan Press.
- Huang, Yu, and Lawrence Jun Zhang. 2019. Does a Process-Genre Approach Help Improve Students' Argumentative Writing in English as a Foreign Language? Findings from an Intervention Study. *Reading and Writing Quarterly* 36 (4): 339-364. doi:10.1080/10573569.2019.1649223
- Hyland, Ken. 2003. Genre-Based Pedagogies: A Social Response to Process. *Journal of Second Language Writing* 12 (1): 17-29. doi:10.1016/S1060-3743(02)00124-8

- Hyland, Ken. 2004. *Genre and Second Language Writing*. Ann Arbor, MI: The University of Michigan Press.
- Hyland, Ken. 2007. Genre Pedagogy: Language, Literacy and L2 Writing Instruction. *Journal of Second Language Writing* 16 (3): 148–164. doi:10.1016/j.jslw.2007.07.005
- Hyland, Ken. 2011. “Learning to Write: Issues in Theory, Research and Pedagogy”. In *The Learning-to-write and Writing-to-learn in an Additional Language*, ed. Rosa Manchon, 17–35. Philadelphia: John Benjamins.
- Hyland, Ken. 2014. *Academic Written English*. Shanghai, China: Shanghai Foreign Language Education Press.
- Jarunthawatchai, W. 2010. *A process-genre approach to teaching second language writing: Theoretical perspective and implementation in a Thai university setting*. PhD diss., University of Southampton.
- Kaur, Sarjit. 2015. Teaching Strategies Used by Thai EFL Lectures to Teach Argumentative Writing. *Procedia - Social and Behavioral Sciences* 208: 143–156. doi:10.1016/j.sbspro.2015.11.191
- Kantz, Margaret. 1990. “Promises of Coherence, Weak Content, and Strong Organization: An Analysis of Students’ Texts”. In *The Reading-to-write: Exploring a Cognitive and Social Process*, ed. Flower, Linda, Victoria Stein, John Ackerman, Margaret J. Kantz, Kathleen McCormick, and Wayne C. Peck, 76-95. New York: Oxford University Press.
- Kroll, Barbara, and Joy Reid. 1994. Guidelines for Designing Writing Prompts: Clarifications, Caveats, and Cautions. *Journal of Second Language Writing* 3: 231-255.
- Lan, Nguyen Thi Huong, and Tran Duc Anh. 2022. Teaching English writing through process-genre approach: An action research project. *Vietnam Journal of Educational Sciences* 18 (2): 21-30.
- Lefkowitz, Natalie. 2009. The Future of Foreign Language Writing. Paper Presented at the Symposium of Second Language Writing, Tempe, AZ.
- Mackey, Alison, and Susan, M. Gass. 2006. *Second Language Research: Methodology and Design*. London: Lawrence Erlbaum Associates.
- Memari Hanjani, Alireza, and Li Li. 2014. EFL Learners’ Written Reflection on their Experience of Attending a Process Genre-based, Student-centered Essay Writing Course. *The Asian Journal of Applied Linguistics* 1 (2): 149-66.
- Negretti, Raffaella, and Maria Kuteeva. 2011. Fostering Metacognitive Genre Awareness in L2 Academic Reading and Writing: A Case Study of Pre-Service English Teachers. *Journal of Second Language Writing* 20: 95-110
- Paltridge, Brian. 2013. “Genre and English for Specific Purposes”. In *The Handbook of English for Specific Purposes*, ed. Paltridge, Brian and Sue Starfield, 347–366. Malden, MA: Wiley.
- Pincas, Anita. 1982. *Writing in English I*. London: Macmillan.
- Plakan, Lia, and Atta Gebiril. 2017. Exploring the Relationship of Organization and Connection with Scores in Integrated Writing Assessment. *Assessing Writing* 31: 98-112.

- Racelis, Juval V., and Paul Kei Matsuda. 2013. Integrating Process and Genre into the Second Language Writing Classroom: Research into Practice. *Language Teaching* 46 (3): 382–393. doi:10.1017/S0261444813000116
- Rahimi, Muhammad, and Lawrence Jun Zhang. 2021. Effects of an Engaging Process-genre Approach on Student Engagement and Writing Achievement. *Reading and Writing Quarterly* 38 (5): 487-503. doi.org/10.1080/10573569.2021.1982431
- Silva, Tony. 1990. "Second Language Composition Instruction: Developments, Issues, and Directions in ESL". In *The Second Language Writing: Research Insights for the Classroom*, ed. Barbara Kroll, 11-36. New York: Cambridge University Press. doi.org/10.1017/CBO9781139524551.005
- Tangpermpoon, Thanatkun. 2008. Integrated Approaches to Improve Students' Writing Skills for English Major Students. *ABAC Journal* 28 (2): 1-9.
- Thongchalerm, Sirisuda, and Wisut Jarunthawatchai. 2020. The Impact of Genre Based Instruction on EFL Learners' Writing Development. *International Journal of Instruction* 13 (1): 1-16.
- Tribble, Christopher. 1996. *Writing*. Oxford, UK: Oxford University Press.
- Wardhana, Chandra Dian Eka. 2022. Exploring the Impact of Process-Genre Approach on Learners' Academic Writing and Higher-Order Thinking Skills. *Journal of Language and Education* 8 (2): 140-153. doi.org/10.17323/jle.2022.12537
- Watanabe, Y. 2001. *Read-to-write tasks for the assessment of second language academic writing skills: Investigating text features and rater reactions*. PhD diss., HI: University of Hawaii
- Wingate, Ursula. 2012. Argument!' Helping Students Understand What Essay Writing Is about. *Journal of English for Academic Purposes* 11 (2): 145–154. doi:10.1016/j.jeap.2011.11.001
- Xu, Xiwen, and Xuemei Li. 2018. Teaching Academic Writing through a Process-Genre Approach: A Pedagogical Exploration of an EAP Program in China. *TESL-EJ* 22 (2): 1-21.
- Yasuda, Sachico. 2015. Exploring Changes in FL Writers' Meaning-Making Choices in Summary Writing: A Systemic Functional Approach. *Journal of Second Language Writing* 27: 105–121. doi:10.1016/j.jslw.2014.09.008
- Yayli, Demet. 2011. From Genre Awareness to Cross-Genre Awareness: A Study in an EFL Context. *Journal of English for Academic Purposes* 10 (3): 121–129. doi:10.1016/j.jeap.2011.02.001
- Yan, Guo. 2005. A Process Genre Model for Teaching Writing. *English Teaching Forum* 43, no.3: 18-26.
- You, Xiaoye. 2004. "The Choice Made from no Choice": English Writing Instruction in a Chinese University. *Journal of Second Language Writing* 13 (2): 97–110. doi:10.1016/j.jslw.2003.11.001
- Yu, Xiaoli. 2020. Lexical Features in Argumentative Writing across English Writers from Different Language Backgrounds. *Journal of Second Language Studies* 3 (1): 82-110
- Zhang, Lawrence Jun. 2016. Reflections on the Pedagogical Imports of Western Practices for Professionalizing ESL/EFL Writing and Writing-Teacher Education. *Australian Review of Applied Linguistics* 39 (3): 203–232. doi:10.1075/aral.39.3.01zha
- Zhang, Tingting, and Lawrence Jun Zhang. 2021. Taking Stock of Genre-based Pedagogy: Sustaining the Development of EFL Students' Knowledge of the Elements in Argumentation and Writing Improvement. *Sustainability* 13 (21): 1-24.

Appendix A. Organization appropriateness scale

Score	Descriptor
1	Organization unsuccessful—a list of ideas without organization, too confusing to evaluate
2	Organization unsuccessful—inappropriate pattern, unclear thesis
3	Organization moderately successful—choice of pattern okay, but not successfully implemented overall
4	Organization somewhat successful—good choice of pattern, has basically successful organization
5	Organization successful—good choice of pattern, well implemented and effective

Appendix B. Coherence scale

Score	Descriptor
1	No apparent logic
2	Topic unclear, logic hard to follow
3	Topic somewhat clear with apparent but inconsistent logic
4	Clear topic that is somewhat effective in logical flow
5	Clear topic with effective logic that the reader can easily follow

Appendix C

Group	Name	Descriptor
Cohesion through connecting words	Connectives	Connection words, also called transition words, as identified by Halliday and Hasan (1976) Measured by incidence
	Logical Operators	Logical operators indicate connections between noun phrases, verb phrases or clauses, such as and, or, if and then Measured by incidence
Cohesion through Repetition	Semantic similarity	Computational comparison of ideas across a text using a corpus
	Anaphor reference	Anaphor (words that refer to earlier words) overlap between sentences
	Argument overlap	Proportion of overlapping nouns, pronouns, and noun phrases across sentences
	Stem overlap	Proportion of word stems that are shared across sentences