Can Scaffolding Mechanisms of Structuring and Problematizing Facilitate the Transfer of Genre-based Knowledge to Another Discourse Mode?

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Abstract

A pivotal issue in research on writing concerns whether the knowledge of how genres are constructed and learned in one discipline/genre can be transferred to other contexts, genres, and disciplines. Yet, studies conducted so far have not presented a unified and complete view of how various writing instructional techniques can result in transferability. This study examined the effect of structuring and problematizing scaffolding mechanisms and the mediating effect of learners’ proficiency level on a cohort of Iranian English learners’ ability to transfer the acquired genre-based knowledge to a new discourse mode. Four groups of thirty pre-intermediate learners chosen from eight intact classes and four groups of advanced learners selected from eight intact classes participated in this study. The performance of the participants in structuring scaffolds, problematizing scaffolds, and combined structuring and problematizing scaffolds conditions were compared to that of the control groups. The results of a two-way ANCOVA revealed that scaffolding mechanisms could significantly result in genre-transferability. The results also suggested that scaffolding mechanisms brought about the best results when offered simultaneously. Besides, the result yielded no significantly moderating effect for learners’ proficiency level. Implications for classrooms are discussed.

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Transferability of skills and knowledge from one writing course to other courses, situations and disciplines is a chief aim in writing pedagogy (Hill, 2012). It is time and resource saving, and thus it is a desirable goal to enable learners to transfer knowledge, skills, and strategies they have acquired in one composition course to other disciplinary and workplace contexts (Clark & Hernandez, 2011; Rounsaville, Goldberg, & Bawarshi, 2008). Nevertheless, transferability does not occur automatically (Beaufort, 2007); rather some pedagogical plans and interventions might facilitate the transfer of skills and knowledge across writing experiences.

Some writing researchers (e.g., Russell, 1997) stated that transferability did not happen in writing classes, and the skills gained in the first year composition courses could not be deployed across university or beyond. Clark and Hernandez (2011), on the other hand, argued that transferability was attainable and the argumentative discourse mode mostly taught in the first year of academic studies could “help students approach writing tasks in various disciplines with greater insight” (p. 65). They maintained that genre-based knowledge learned in argumentative essays could be transferred to other types of essays and writing forms provided that learners would understand writing as a genre, learn to view a text in terms of its rhetorical and social purpose, and would be able to abstract principles from one rhetorical situation. Such an understanding of genres, Clark and Hernandez believed, enables learners to apply those abstract principles to other rhetorical situations and genre and not only “write more effectively in their composition course”, but also “acquire the tools they need to address new writing situations” (p. 65). They recommended teaching students to examine texts for transfer cues, “so that they would be able to apply what they know to other writing genres they might encounter in other courses” (p. 65). Devitt (2004), similarly, argued against explicit decontextualized teaching of generic features and suggested raising genre awareness by teaching students how genres work,
and how to analyze genres. According to her, this would help learners handle new genres appropriately, and learn them more quickly.

Meyer, Land, and Bailie (2010), by the same token, argued that explicit instruction of text structure with a formula-based approach would only result in a limited understanding of how texts work and thus would be helpful in a limited number of circumstances. They, hence, suggested that implicit awareness raising techniques would empower the writers to not only learn how to write in a particular genre, but also to gain knowledge about how the purpose of a text determines its various components, which would, in turn, assist them in writing in various genres.

Scholars such as So (2005), on the other hand, claimed that genre-transferability in L2 settings could only occur when explicit instruction was applied to foster the linguistic awareness of one specific genre. She regarded the implicit instructional techniques as insufficient for triggering genre awareness. Therefore, whether implicit or explicit instructional techniques can assist learners in gaining genre-awareness is yet arguable, and the studies conducted thus far have failed to offer a conclusive answer to the question whether explicit or implicit instruction leads to genre awareness and genre-transferability.

A part of the knowledge one possesses about genres is the knowledge of organizational and rhetorical pattern of discourse modes. Four modes of writing, namely descriptive, narrative, expository, and argumentative have been identified by Richards and Schmidt (2010). They view narrative writing as the first, and simplest mode of writing, which requires the learners to narrate an event or to tell a story. Expository writing, on the other hand, is aimed at informing about a particular topic. In this mode of writing, people try to provide information about a specific topic and explain it (Richards & Schmidt, 2010). Meyer (1999) identified *compare and contrast* as one of the text types within the expository discourse mode. Writing expository texts has been known to be an important part of academic learning (Englert & Heibert, 1984; Hamman & Stevens, 2003). Besides, *compare and contrast* writing has been reported to be more difficult than other expository formats (Bruning & Horn, 2000). Yet, the
organization of the information in this text type has been under-researched (Hamman & Stevens, 2003). Descriptive writing, to Richards and Schmidt (2010, p. 371) “provides a verbal picture or account of a person, place or thing.”

Argumentative writing which necessitates developing ideas and organizing them into logical, convincing arguments has been reported to be one of the most challenging genre for learners to master (Hyland, 1999) and yet is “a fundamental writing style across various English for academic purposes (EAP) and English for specific purposes (ESP) writing tasks” (Cheng & Chen, 2009). In argumentative writing, learners are asked to assert their opinion and take a stance with regards to the topic and support their view with evidence (Stein, Bernas, Calicchia, & Wright, 1995).

Each discourse mode necessitates the utilization of a certain organizational and rhetorical pattern, which is a part of the knowledge one has about genres. Proposing a descriptive framework for the rhetorical structure of the argumentative essay not found in other discourse modes, Hyland (1990) contended that the difficulty English as a foreign language (EFL)/English as a second language (ESL) learners experience when writing in English would stems partly from their unfamiliarity with the required generic structure, and the ways texts were organized. Gaining an understanding of the fact that texts are organized differently plays a pivotal role in improving one’s ability to write in English.

Transferability is referred to as the possibility of transmission of skills and knowledge acquired in one writing context and genre to another (Clark & Hernandez, 2011). Despite the advantages transferability is assumed to offer in writing programs (Clark & Hernandez, 2011), studies conducted so far have not presented a unified and consistent view of how various writing instructional techniques can result in transferability of genre-based knowledge and whether genre-awareness can be gained and transferred to writing other genres (Yang, 2011).

Given the prominent role of argumentative and expository writing and the advantages that transferability of genre-based knowledge would offer, this study investigated whether scaffolding mechanisms could make such
transferability possible. The present study had the text-structure knowledge as its focal point and examined whether the provision of structuring and problematizing scaffolds would enable learners to transfer the knowledge of how certain structures comprise texts to another mode of writing. Besides, the researchers aimed at examining the role of learners’ proficiency level in the effectiveness of scaffolding instructional techniques regarding the transferability of genre-based knowledge.

**Literature Review**

**Scaffolding and the Writing Skill**

The ideas proposed by Wood, Bruner, and Ross (1976) and Vygotsky (1978) regarding the necessity of the provision of some assistance by a more knowledgeable person in one-on-one interactions gave rise to the concept of scaffolding. Such assistance, which is gradually withdrawn as learners demonstrate signs of improvement, is intended to enable the learners to gain the ability to perform successfully in similar circumstances (Vygotsky, 1978). Scaffolding has been reported to improve learners’ domain knowledge, as well as metacognitive, and self-regulating skills (Azevedo & Hadwin, 2005). Reiser (2004) argued that all various techniques which instructors can employ to scaffold learning share a number of underlying features and can be categorized into two main scaffolding mechanisms, namely structuring and problematizing, which according to Reiser are in tension yet complementary.

Structuring scaffolds, as argued by Reiser (2004), are those intended to structure the task by simplifying the task, breaking it into smaller manageable parts, providing models and explicit explanations, and narrowing down by presenting explicit directions. Problematizing scaffolds, on the other hand, elicit more attention to certain issues of the task, make some aspects of students’ work more problematic, and provoke learners’ sense of curiosity and interest, and require the learners to reflect through demanding articulation of decisions and reasons (Reiser, 2004).

One of the areas in which language learners can benefit from scaffolds is the writing skill. Writing is a multifaceted endeavor that involves not
only cognitive but also affective and metacognitive aspects (Choi, 2013; Kanlapan & Velasco, 2009; Ruan, 2013). Given the fact that EFL learners often do not share the same cultural and linguistic backgrounds as those of the English language speaking communities (Kamimura, 2000), their L1 writing experience may provide them with a repertoire of conventions that are not always compatible with those used by native writers (Kutz, Groden, & Zamel, 1993). Thus, in a second or foreign language, many forms of writing require conscious efforts and practice in composing, developing, and analyzing ideas (Myles, 2002) and for most learners, writing in a language other than their own mother tongue is challenging (Gilmore, 2009).

Scaffolds are reportedly effective in facilitating the daunting task of writing in another language as they have been reported to assist learners in the acquisition of journal writing skills (Lai & Calandra, 2010; Veerappan, Suan, & Sulaiman, 2011), content knowledge and reviewing skills (Cho & Schunn, 2005) and paragraph writing ability (Baleghizadeh, Timcheh Memar, & Timcheh Memar, 2011). Nevertheless, to date, the effectiveness of scaffolds in facilitating the transferability of genre-based knowledge has not been investigated.

**Transferability and the Writing Skill**

The issue of transfer in writing programs, in its general form, deals with the questions about whether skills, habits, strategies, and knowledge learned in one composition course can be transferred to other disciplinary and workplace contexts (Clark & Hernandez, 2011; Rounsaville, Goldberg, & Bawarshi, 2008). Genre-transfer, specifically, concerns whether the knowledge of how genres are constructed and learned in one discipline/genre is transferred to other contexts, genres, and disciplines. Hill (2012) maintained that "genre-transferability is possible, and referred to “low-road and high-road transfers” (p. 4), a distinction made by Perkins and Salmon (1992). As for low-road transfers, he contended where “the surface characteristics” of the two settings are very similar, transfer is more probable and happens easily in writing (Hill, 2012, p. 4).
On the other hand, Hill (2012) maintained that high-road transfer needs “deliberate, conscious abstraction of skills or knowledge from one context for application to another” (p. 4), and is harder for the learners. To him, high-road transfer of genre-based knowledge is possible only if learners have enough knowledge of genres, do not view genres as inflexible and strict, and can use genre in their writing, with understanding of their “social context” (p. 4).

Several studies have been carried out to examine what kind of writing instruction can foster transferability of genre-based knowledge. Devitt (2004) argued that transferability of genre-based knowledge would require an awareness of genres and the way they work. Yang (2012) reported that providing model exemplars and analyzing texts would play a significant role in achieving transferability of genre-based knowledge. He maintained that through the analysis of such models, learners could acquire an understanding of genres later used when they encountered other forms of writing. Khodabandeh, Jafarigohar, Soleimani, and Hemmati (2013) reported that implicit instruction in the form of analysis of models led to the achievement of genre awareness. In another study, Khodabandeh (2014) investigated whether implicit or explicit genre-based instruction in an essay writing course would lead to genre-awareness. The results of the analysis of the posttest scores revealed that the group who had received explicit formal instruction on genre performed better in the posttest essay. The results also showed that implicit instruction enjoyed an advantage over no instruction.

As mentioned earlier, the debate on whether implicit or explicit pedagogical techniques lead to genre-awareness and transferability is still unsettled. In addition, the issue of whether and what type of scaffolds can lead to the transferability of genre-based knowledge has not been addressed in the literature. Hence, the present study investigated whether two scaffolding mechanisms when offered separately and simultaneously could help the transfer of the generic text-structure knowledge as the genre-based knowledge, and whether learners’ level of proficiency mediated the impact of scaffolds on genre-based knowledge.
transferability. Differently stated, the present study strived to answer 1) whether structuring and problematizing scaffolds when offered separately and when offered in combination during the writing process can lead to the transfer of the acquired genre-based knowledge, and 2) whether learners’ level of proficiency mediates the impact of scaffolds on genre-based knowledge transferability.

**Method**

**Participants**

Eight groups of learners studying general English in 16 intact classes in a language school were chosen in a way that learners of each group would be taught by the same teacher. The age of the participants ranged between 17 and 38 (\(M = 26.50, SD = 5.90\)). In each group 30 students were randomly selected from two intact classes to take part in the present study. From these eight groups, four were chosen from eight intact classes of pre-intermediate learners and four were selected from eight intact classes of advanced learners. The pre-intermediate learners had passed the Cambridge Key English Test, and the advanced learners had passed the Cambridge First Certificate Examination.

**Materials and Instruments**

The course was a general proficiency one designed to increase learners’ four skills. In the advanced classes the *Advanced* book from the *Landmark* series (Haines & Stewart, 2002) and in the pre-intermediate classes the pre-intermediate book from the *Total English Books* series (Richard & Araminta, 2005) were taught throughout the term which consisted of 42 hours of learning. The intervention itself lasted for eight 90-minute sessions during which promoting the writing skill was the main objective.

To assess the performance of the participants regarding the text structure of the compare and contrast essays, the structure rubric proposed by Hamman and Stevens (2003) consisting of sub-categories such as, "Main Idea", "Evidence of compare-contrast text structure", 


"Progression", and "Development" (Max = 20) were used to assess the participants' expository essays both prior and after the treatment. Spivey (1991) reported three acceptable organizational structures for compare and contrast writing namely, point by point (attributes), similarities and differences clusters, or item by item (topic), and all these structures are taken into account in the aforementioned rubric.

**Data Collection Procedures**

The process-genre approach to writing by Badger and White (2000) was employed in this study. They suggested viewing the genre and process approaches to writing not as mutually exclusive but rather as complementary. Their process-genre approach regards writing as involving not only knowledge about language and the writing context but also the skills needed in using language to make the final draft. It also encourages learners to go through the processes of planning, multiple drafting, and revisions. Therefore, in the current study, not only were the various stages of writing recognized, but also the fact that each discourse mode has its own text structure and moves contributing to the ease of understanding the texts (Hamman & Stevens, 2003) was acknowledged. Therefore, different discourse modes, though requiring the learners to go through the same process of pre-writing, writing, and revising, were believed to necessitate the application of distinct text structures in the drafting phase.

In the present study, participants in the experimental groups received scaffolding, while those in the control group did not. The first experimental group of the advanced learners was labeled the structuring scaffolds for advanced learners condition (SSC-A) in which learners received structuring scaffolds. The learners in the second experimental group comprised advanced learners who were offered problematizing scaffolds and were, therefore, called the problematizing scaffolds for advanced learners condition (PSC-A). The third experimental group for the advanced learners benefited from both structuring and problematizing scaffolds and was, thus, named the structuring and problematizing
scaffolds for advanced learners condition (SPSC-A). The fourth group of the advanced did not receive any scaffolds, hence labeled the control group for advanced learners (CG-A).

The fifth group was chosen from the pre-intermediate participants and was given structuring scaffolds like their advanced counterparts. They were consequently called the structuring scaffolds for pre-intermediate Learners Condition (SSC-PI). The sixth group, chosen from pre-intermediate classes, received problematizing scaffolds and was called the problematizing scaffolds condition for pre-intermediate condition (PSC-PI). The seventh group comprised pre-intermediate learners who were offered both structuring and problematizing scaffolds. This experimental condition was named the structuring and problematizing Scaffolds condition for pre-intermediate condition (SPSC-PI). Finally, the eighth group of the participants, the control group for pre-intermediate learners (CG-PI), similar to their advanced counterparts, was not provided with any scaffolds.

Prior to the intervention, in the pretest, the learners received three compare and contrast essay topics from which they could choose one to write about. This was intended to account for the possible impact of topic interest on learners' performance, since, as argued by Monem (2010), topic selection plays a crucial role in helping students remain focused and motivated throughout the writing process. Hamman and Stevens (2003) maintained that there are two steps to be taken while writing a compare and contrast expository essay: “(a) acquire information about each of the topics, and (b) organize the information to make similarities and differences between topics clear to readers” (p. 733). Since it was the transfer of genre-based knowledge of text structure organization that was of interest in this study, the researchers had to control for the possible effect of the lack of content knowledge on learners’ performance in compare and contrast essays (Hamman & Stevens, 2003). To achieve this objective and for each essay prompt, we provided the learners with charts cueing three similarities and differences in the form of phrases.
The first author and a Ph.D. candidate in TEFL rated 12.5% of the papers in the pretest and the inter-raters' agreement was estimated (kappa Cohen’s value = .86). The rest of the papers in the pretest were rated only by the first author. The intervention included provision of the scaffolding mechanisms which were gradually withdrawn during three phases. According to Brunner (1983), scaffolds should be dismantled gradually as the learners signal ability in progressing on their own. Experimental conditions in both proficiency levels differed with regard to the type of scaffolds provided in the first phase. Nonetheless, the second and third phases remained consistent across all the experimental conditions. The argumentative genre, “an essential mode of written discourse” (Qian, 2013, p. 213), was taught in the intervention to investigate whether the genre-based knowledge of text-structure can be transferred.

During the first phase of offering scaffolds, at each of the five stages of the writing process defined by Hassan and Akhand (2010), structuring scaffolds were offered to learners in the structuring conditions. Structuring scaffolds were in the form of explicit explanations regarding the purpose of each stage of the writing process, explicit direction about what the learners needed to do next, as well as a model for each stage. To control for the possible effect of feedback on performance, we did not include peer and teacher feedback stages in the study. Each stage of the writing process took one whole session. In the drafting phase, the learners received an explicit explanation of Hyland’s (1990) model of argumentation. Besides, essay models as well as explanations regarding the functional aim of each paragraph were given to the participants in structuring scaffolds conditions. Examples of such explanations included: “An argumentative essay begins with the thesis which introduces the proposal”, and “There are four optional moves and one obligatory move at the Thesis stage”.

In the same phase, learners in the PSCs were, on the other hand, offered very brief explanations of the stages preceding the prompts which were aimed at eliciting the learners’ plans regarding the moves required at each stage, and at encouraging monitoring. Examples of such prompts included: “How are you going to start your introduction?”, “When and
how are you going to have a specific statement of position?” and “How are you going to have an introduction for your claim and reasons?” The learners did not have to answer the prompts in oral or written forms. They, however, read the prompts quietly to themselves and thought about the answers. The prompts offered in the drafting phase were designed to elicit the moves noted in Hyland’s (1990) model of argumentation.

The participants in SPSC, in the first phase of offering scaffolds, received structuring as well as problematizing scaffolds resembling those given to the learners in SSCs and PSCs. In other words, they received essay models and explicit explanations and clarifications with regard to the aim of each phase of writing and each paragraph. Besides, they were offered the prompts eliciting decisions at each stage of the writing process.

During the second phase of offering the scaffolds, the instructor offered merely an explanation of each phase and required the learners to write an argumentative essay without a model or prompts. However, in the third phase, merely the names of the 5 stages were put on the board for the learners in the six experimental conditions, and the experimental conditions participants were asked to write another argumentative essay.

While the learners in the six experimental conditions received scaffolds which were gradually withdrawn during three phases, the control groups only received brief explanations regarding each stage of the writing process and were not provided with models or problematizing prompts. After the intervention, in the posttest, similar to the pretest, participants chose from among three compare and contrast essay prompts each with a chart suggesting differences and similarities.

**Results**

This study aimed at discerning whether separate and combined presentation of structuring and problematizing scaffolds could promote the transferability of genre-based knowledge, and whether the learners’ proficiency level mediated such impact. To this end, the researchers examined the impact of scaffolds on learners’ argumentative writing
performance with regard to the text structure of compare and contrast posttest essays.

To ensure the homogeneity of learners within each proficiency level in terms of the writing skill prior to the treatment, researchers ran two separate one-way Analysis of Variance (ANOVA) tests. Table 1 depicts mean and standard deviation (SD) for pre-intermediate and advanced learners in the pretest.

Table 1

**Descriptive Statistics for the Pretest**

<table>
<thead>
<tr>
<th>Group</th>
<th>Proficiency Level</th>
<th>Mean</th>
<th>SD</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSC</td>
<td>Pre-intermediate</td>
<td>10.50</td>
<td>3.02</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Advance</td>
<td>12.83</td>
<td>2.75</td>
<td>30</td>
</tr>
<tr>
<td>PSC</td>
<td>Pre-intermediate</td>
<td>10.68</td>
<td>3.01</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Advance</td>
<td>14.03</td>
<td>1.65</td>
<td>30</td>
</tr>
<tr>
<td>SPSC</td>
<td>Pre-intermediate</td>
<td>10.86</td>
<td>2.79</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Advanced</td>
<td>13.96</td>
<td>1.86</td>
<td>30</td>
</tr>
<tr>
<td>CG</td>
<td>Pre-intermediate</td>
<td>11.03</td>
<td>3.21</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Advance</td>
<td>12.93</td>
<td>2.13</td>
<td>30</td>
</tr>
</tbody>
</table>

The results of the one-way ANOVA on pre-intermediate learners’ pretest score are shown in Table 2.

Table 2

**One-way ANOVA for the Pretest: Pre-intermediate Learners**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>.70</td>
<td>3</td>
<td>.23</td>
<td>.02</td>
<td>.99</td>
</tr>
<tr>
<td>Within groups</td>
<td>1055.66</td>
<td>116</td>
<td>9.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1056.36</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 2, no significant main effect was detected for the group, $F(3, 119) = .02, p > .05$, indicating the homogeneity of pre-
intermediate learners in SSC, PSC, SPSC, and CG in terms of their expository writing ability prior to the treatment.

Table 3 illustrates the results of the one-way ANOVA run to examine the homogeneity of advance learners in terms of writing ability before the treatment began.

Table 3
One-way ANOVA for the Pretest: Pre-intermediate Learners

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>37.62</td>
<td>3</td>
<td>12.54</td>
<td>2.48</td>
<td>.06</td>
</tr>
<tr>
<td>Within groups</td>
<td>585.96</td>
<td>116</td>
<td>5.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>623.59</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Table 3 displays, no significant was found among advanced SSC, PSC, SPSC, and CG learners, F(3, 119) = 2.48, p > .05. Therefore, it was concluded that advanced learners in the four groups were homogeneous with regard to their writing skill prior to the treatment.

Given the possible initial differences of the participants in terms of the ability to compare and contrast essays, two-way analysis of covariance (ANCOVA) was deployed to control for the discrepancies in the pretest scores. Descriptive results of the posttest are demonstrated in Table 4.

Table 4
Descriptive Results of the Compare and Contrast Posttest

<table>
<thead>
<tr>
<th>Groups</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSC</td>
<td>15.55</td>
<td>2.63</td>
</tr>
<tr>
<td>PSC</td>
<td>13.75</td>
<td>2.65</td>
</tr>
<tr>
<td>SPSC</td>
<td>17.43</td>
<td>2.16</td>
</tr>
<tr>
<td>CG</td>
<td>11.31</td>
<td>2.47</td>
</tr>
</tbody>
</table>

As shown in Table 4, SPSC (M = 17.43, SD = 2.16) gained the highest mean score. Table 5 displays the results of the two-way ANCOVA for the compare and contrast essay tests.
Table 5
Two-way ANCOVA by Groups* Proficiency for the Effect of Scaffolding on Genre-Transferability

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>104.60</td>
<td>1</td>
<td>104.60</td>
<td>33.33</td>
<td>&lt;.00</td>
<td>.12</td>
</tr>
<tr>
<td>Groups</td>
<td>1220.47</td>
<td>3</td>
<td>406.82</td>
<td>129.63</td>
<td>&lt;.00</td>
<td>.62</td>
</tr>
<tr>
<td>Proficiency</td>
<td>353.72</td>
<td>1</td>
<td>353.72</td>
<td>112.71</td>
<td>&lt;.00</td>
<td>.32</td>
</tr>
<tr>
<td>Groups * Proficiency</td>
<td>16.29</td>
<td>3</td>
<td>5.43</td>
<td>1.73</td>
<td>.16</td>
<td>.02</td>
</tr>
<tr>
<td>Error</td>
<td>724.95</td>
<td>231</td>
<td>3.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>53235.00</td>
<td>240</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With regard to the first research question, as Table 5 depicts, significant main effect was detected for the group, $F(3, 240) = 129.63, p < .05; \eta^2 = .62$. Table 6 demonstrates the results of the post hoc Scheffe’s test.

Table 6
Post Hoc Scheffe’s Test

<table>
<thead>
<tr>
<th>Group</th>
<th>PSC</th>
<th>SPSC</th>
<th>CG</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSC</td>
<td>1.85*</td>
<td>-1.82*</td>
<td>4.26*</td>
</tr>
<tr>
<td>PSC</td>
<td>-3.67*</td>
<td>2.41*</td>
<td></td>
</tr>
<tr>
<td>SPCS</td>
<td></td>
<td>6.08*</td>
<td></td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.

As demonstrated in Table 6 and 3, the results of the post-hoc Scheffe’s test indicated that the SPSCs ($M = 17.43, SD = 2.16$), SSCs ($M = 15.55, SD = 2.63$), and PSCs ($M = 13.75, SD = 2.65$) could gain mean scores significantly higher than the ones obtained by GCs ($M = 11.31, SD = 2.47$). Besides, SSCs were found to have performed significantly better than PSCs. Thus, both mechanisms of scaffolding could significantly improve the participants’ ability to transfer the knowledge they had learned about how genres possessed specific text structure to compare and contrast essays. The results of the post-hoc Scheffe’s tests further indicated
that the SPSCs \((M = 17.43, SD = 2.16)\) significantly outperformed the other experimental conditions and the control groups. This indicated that the best results were found when the two scaffolding mechanisms were presented simultaneously.

As for the second research question, as Table 5 demonstrates, significant main effect was observed for the proficiency level \(F(1, 240) = 112.71, p < .05; \eta^2 = .32\). Nevertheless, no significant interaction was detected between the group and the proficiency level \(F(3, 240) = 1.73, p > .05; \eta^2 = .02\). Thus, learners’ proficiency level was found not to mediate the effect of scaffolding mechanisms on genre-transferability, and both pre-intermediate and advance learners benefited from the scaffolds in the same way.

**Discussion**

With regard to the first research question which addressed whether separate and combined structuring and problematizing scaffolds could lead to the transfer of acquired genre-based knowledge, the three scaffolding conditions of structuring, problematizing, and their combination led to such transfer. In the structuring conditions, the process of writing argumentative essays was scaffolded through provision of models, explicit explanations regarding the moves suggested by Hyland (1990), and directions narrowing down choices at each stage of the writing process. Significant improvements were detected for the learners in SSCs with regard to the text structure when they wrote compare and contrast essays in the posttests. Therefore, such instructional technique offered as scaffolds appeared to raise awareness about the existence of discourse mode-specific features. This confirms the results of previous studies reporting that explicit teaching of genres facilitates genre-transferability (e.g., So, 2005).

Clark and Hernandez (2011) contended that “a metacognitive understanding of genre can help students make connections between the type of writing assigned in the composition course ... and the writing genres they encounter in other disciplines” (p. 65). Receiving
argumentative essay models, explicit explanations regarding the mandatory moves in an argument designed to structure and simplify the tasks seemed to have resulted in such understanding of genre-text relations. This is consistent with Mustafa’s (1995) reports on the effectiveness of formal instruction in raising students' awareness of text conventions. The results are also in line with those gained by Khodabandeh (2014) who reported that genre awareness could be gained through formal explicit instruction. The results also echo Yang’s (2012) ideas about the prominence of model provision in achieving genre-transferability. Yang argued that model exemplars and analyzing texts would lead to transferability of genre-based knowledge, and the analysis of models enabled individuals to develop awareness of the nature of genres. Such awareness, according to Yang, can be employed in future confrontations with other writing modes.

Besides, the findings indicated that problematizing scaffolds and prompts eliciting reflections, monitoring, planning, and evaluation led to improvements in the posttest. This emphasizes that implicit instructional techniques of text construction can result in genre-transferability as well. Therefore, the results gained in this study are congruent with the ideas of those who advocate implicit awareness raising techniques in teaching genres (e.g. Clark & Hernandez, 2011; Land & Bailie, 2010). They also chime with the study results reporting the role of implicit teaching of genres in provoking genre-awareness (e.g., Khodabandeh et al, 2013). As discussed earlier, neither do the findings conflict with those gained by scholars who found explicit instructions can benefit learners in terms of transferring genre-based knowledge to new contexts (e.g., So, 2005).

It appears that using scaffolding techniques that either structure or problematize aspects of task can increase learners’ knowledge and awareness of the ways certain text organizational techniques and moves belong to certain discourse modes and genres. Therefore, it seems plausible to advocate the use and further investigation of scaffolds to achieve transferability of genre-based knowledge. Given the reported advantages of scaffolds (Veerappan et al., 2011), and the fact that both
scaffolding mechanisms proved to pave the way for the transfer of genre-based knowledge of text structure organization, we suggest a shift in interest from the examination of explicit and implicit methods of teaching genres toward the exploitation and investigation of the scaffolded writing. However, structuring scaffolding techniques proved to be more effective than problematizing ones in terms of enabling the learners to transfer the knowledge they had acquired about the way text structure organization relates to discourse modes.

The results also indicated that when the two scaffolding mechanisms were exploited simultaneously to assist the learners in navigating throughout the writing process to generate a paper in one discourse mode, the learners performed even better. This echoes Reiser’s (2004) suggestions regarding the application of the two scaffolding mechanisms simultaneously and suggests that while engaged in writing tasks, learners need to receive assistance. The results also show that both mechanisms simplify the task and problematize its critical aspects to gain a metacognitive understanding about the ways texts are constructed in a certain text organization while traversing the writing process.

With regard to the second question, and the role of participants' proficiency level in the effectiveness of scaffolds, the results indicated no moderating effect for the proficiency level. This shows that genre-based knowledge can be gained and transferred to other contexts even for learners with lower levels of proficiency, provided that the appropriate instructional technique is opted for. Previous studies on the issue of transferability had not taken the role of proficiency into account. The results of the present study, however, can motivate instructors of beginner learners to make use of scaffolding strategies as pedagogical techniques in writing classes as the findings of this study suggest that both low and high proficiency learners can profit from scaffolds even in their implicit form to gain genre awareness. The results, therefore, also confirm those stressing the effectiveness of scaffolds in triggering learning and internalization of knowledge among low proficiency levels (e.g., Samana, 2013).
Conclusions

The present study showed that both structuring and problematizing scaffolds led to the transfer of genre-based knowledge of text structure organization. The structuring scaffolds were found to be more effective in making such transfer happen. Besides, the best results were gained when both scaffolding mechanisms were offered simultaneously, and the learners’ proficiency level did not mediate the impact of scaffolds. This, therefore, should motivate instructors to adopt scaffolding techniques even while working with low-proficient L2 writers. The results can also be of interest to those dealing with mixed-ability classes as, according to the results of this study, the same scaffolding techniques can be used and be equally fruitful for learners of different abilities. Moreover, the results hint to the necessity of teacher training composition courses for mostly teaching the academic argumentative genre, highlighting the need to familiarize writing instructors in such courses with scaffolding strategies and mechanisms. Such composition courses can result in the acquisition of meta-awareness about writing and rhetorical strategies (Wardle, 2007). Such awareness, which can be achieved through deployment of scaffolding strategies, enables learners to acquire the genre awareness which they can apply in their future work and other educational contexts.

In the present study, genre-knowledge was confined to text-structure knowledge having just one component of genre-knowledge (Devitt, 2004). Thus, further studies are needed to delve into the impact of scaffolded writing on other aspects of genre-knowledge such as text function. It is suggested that writing instructors and researchers interested in genre-transferability focus on ways scaffolds can make possible various aspects of genres, and benefit foreign language writers. The results obtained in this study should motivate writing instructors to exploit both scaffolding mechanisms to assist learners in gaining deeper understandings about the ways generic texts and discourse modes are constructed and to add to their own repertoire of genre-based knowledge, which they would utilize in future writing contexts.
References


