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Applying the Toulmin Model in Teaching L2 Argumentative Writing

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Abstract

This classroom-based research is intended to examine the effectiveness of employment of the Toulmin model in teaching argumentative writing in a Turkish EFL university classroom. Argumentative writing samples by 16 freshmen were collected before and after the instruction. During the instruction, a variety of one-hour activities incorporating the Toulmin model were integrated into the regular 10-week teaching curriculum, including explicit instruction of the Toulmin model, awareness-raising about the Toulmin model and its elements with carefully selected reading passages, class debate on controversial issues, and identification of Toulmin elements in published argumentative essays. The results showed that students' argumentative papers improved after instruction, presenting more enriching and complex argument structures, exhibiting the important elements in argumentation, such as opposing views and rebuttals, which were almost non-existent in their previous argumentative papers. The students also felt that the instruction had empowered them to write argumentative papers in the future.

Keywords: Toulmin model, academic argument, argumentative instruction, Turkish EFL university students, academic writing, EFL writing

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1. Introduction

The skill of argumentation has held an indisputably important role in academic studies. In particular, at the university level, students need to learn how to critically judge, evaluate, and respond to propositions presented by others and express their own points of view in academically appropriate ways (Bridgeman & Carlson, 1983; Feak & Dobson, 1996; Varghese & Abraham, 1998). However, based on my experience in teaching at universities in different educational contexts, including the US, China, and

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Turkey, students generally suffer from insufficient argumentative writing abilities, along with the lack of critical thinking skills. This observation has been empirically supported in a number of studies (e.g., Applebee, Langer, Mullis, Latham, & Gentile, 1994; Qin & Karabacak, 2010; Varghese & Abraham, 1998), which indicate that students' argumentative papers both in L1 and L2 settings are often minimally developed and poorly reasoned.

In the Turkish context, it is believed that educational system in Turkey, especially at the governmentrun public schools, is characterized by rote-memorization, and students' abilities to express their own thoughts and to make judgments of ideas before making decisions are often neglected (Alagözlü, 2007). Furthermore, Alagözlü and Süzer (2010) maintain that the Turkish cultural disposition emphasizing social harmony and respect for the authority may also lead to Turkish students' reluctance to voice their own opinions and ideas independently. Therefore, it can be seen that this educational practice and cultural inclination unavoidably hampers the students' development of argumentative writing skills, which emphasize forming one's own point of view. In the analysis of Turkish EFL university students' essays in a literature class, Alagözlü (2007) found that students failed to support their claims with reasons and evidence from the texts they read, and even if they happened to do so, the support was inadequate. Qin (2011) examined reaction papers to book chapters written by 19 Turkish sophmores majoring in English Language Teaching and observed that the papers tended to show agreement with the course readings or discuss implications drawn from the readings rather than to refute or challenge statements from readings. These studies point to the Turkish EFL university students' weakness in forming their own opinions and also in supporting them in academically appropriate ways.

Furthermore, recent research in contrastive rhetoric has indicated that writing is a cultural phenomenon, and different argument patterns exist across cultures (Connor, 1996; Hinkel, 1994; Purves, 1988). Specifically, differences between English and Turkish rhetorical patterns were noted by Enginarlar (1990), Oktar (1991), and Uysal (2008). Enginarlar (1990) found that Turkish students' essays in Turkish were more indirect with more digressions and embellishment compared to the essays in English. The more recent study comparing the Turkish and English argumentative writing by Uysal (2008) examined the rhetorical patterns in Turkish and English essays written on two different topics by 18 Turkish native speakers; differences were found in the location of thesis statement (2008). Analyzing the same data from another perspective (i.e., the use of Toulmin model), Uysal (2012) concluded that citing or quoting authority analogies were more favored in Turkish essays than English essays where real-life examples were preferred as evidence; furthermore, more figurative language, clichés, and metaphors were observed in Turkish essays. Likewise, Qin (2011) indicated that Turkish sophomore students failed to substantiate their claims with support sometimes; even if there was some kind of support, it was often based on personal experiences; other forms of evidence which are more favored in the English academic community, such as research articles, statistics, citing authorities were very rare in their papers.

As seen above, Turkish university EFL students are in general lacking in knowledge in argumentation skills; therefore, it would be pedagogically useful to provide these students with explicit instruction on argumentative skills. To this end, a strong theoretical model of argumentation is needed. The Toulmin model (1958, 2003), proposed by the British philosopher Toulmin, due to its versatile applicability in analyzing different kinds of argumentation ranging from daily-life examples to laws and social science disciplines, has been widely taught to university students in English academic community to help their argumentative writing. It is composed of three main elements: *claim, data,* and *warrant,* and three second-level elements: *qualifier, backing,* and *rebuttal.* Traditionally, in the EFL academic settings, argumentative writing is often presented to students as supporting a writer's point of view/claim with evidence and data. However, as seen in the Toulmin model, the authentic argumentation constitutes more than claim and evidence; there are more elements, such as warrant, backing, counterargument, and rebuttal. With the

Toulmin model, the complexity and dynamics of argumentation can be captured and depicted more lucidly.

In the L2 academic settings, several studies have already shown that Toulmin model can be used as a heuristic tool to teach argumentative writing in both L1 and L2 contexts. Yeh (1998) investigated the effect of two types of instruction on the argumentative writing abilities of 116 7th grade American students (mostly from non-English speaking family backgrounds). The two types of instruction were (a) explicit instruction of the Toulmin model combined with concept-mapping activities (i.e., developing a concept-map with the main claim in the middle and branches for an introduction, data, and conclusion) and (b) concept-mapping activities only. The study showed significantly greater effectiveness for the former type of instruction in assisting the 7th graders to grasp argument knowledge and strategies. Similarly, Bacha (2010), adopted Toulmin's argumentative elements as a macro-scale organization for argumentative writing and introduced it to Arabic EFL university students in Lebanon; students were found to benefit from this instruction in that their papers contained more effectively stated theses and refutations of counterarguments. Studying with a group of undergraduates in a Singapore university, Varghese and Abraham (1998) provided students with explicit instruction in the Toulmin model, and students produced more explicit claims, more specific and developed data, and were aware of views from both sides as well.

Despite the findings that Turkish university students are insufficient in their argumentative writing, so far, no L2 writing research has examined whether the Toulmin model can be taught explicitly to Turkish university students to improve their argumentative abilities. To this end, this classroom-based research was conducted in a Turkish EFL university class of 16 university freshmen to examine whether the explicit instruction of rhetorical patterns of English argumentative discourse with the Toulmin model would be effective in helping students improve their argumentative writing ability. Two research questions investigated were as follows:

1. Is there any effect of instruction with the Toulmin model on Turkish EFL university students' argumentative writing?

2. If there is any effect, in what aspect(s) does the instruction improve students' writing?

2. Method

The current study was conducted with a class of 16 Turkish EFL undergraduate students majoring in English Language Teaching and was embedded in a course taught by the researcher where basic study and research skills and critical thinking skills were emphasized. During the first week of the semester, students were asked to compose an argumentative paper on a topic of students' interest within 2 hours during the class time. The choice of appropriate writing topic plays an important role in whether students are able to produce an effective argumentative paper (Grabe & Kaplan 1996). Therefore, the topic, carefully chosen by the researcher, was related to whether students believe that the mass media exerts an immense influence on forming young generation's opinions or not. It is safe to assume this topic is both relevant and motivating for the majority of university freshmen nowadays, who have grown up in this media-saturated society.

The instruction of Toulmin model (1958, 2003) was integrated into the weekly one-hour teaching activities throughout the semester. During the second week, students were introduced to the Toulmin model and its elements through some daily-life argumentation topics, such as "how to persuade your parents to buy you a new car," "why a particular chewing gum is the best gum ever." By presenting the Toulmin model in these simple daily issues, students were able to understand the basics of Toulmin model in a more straightforward way.

Then, during the third and fourth weeks, students were gradually provided with more academic reading passages so that their awareness of the Toulmin elements could be enhanced. Reading passages, carefully chosen from the online database called "Opposing Viewpoints Resource Centre" (OVRC) (http://gale.cengage.com/OpposingViewpoints), present current controversial issues from different perspectives, such as "whether the Internet promotes or isolates human interactions," "whether the Internet has improved education or not." These reading passages were aimed to strengthen students' understanding of writers' own point of view, evidence, opposing views, and refutation, all crucial Toulmin elements in argumentation before they were able to incorporate these elements into their own writing.

During the fifth and sixth weeks, a class debate was arranged to consolidate the students' mastery of the Toulmin model. A controversial topic on whether the future role of English as a global language is assured was assigned to the class, which was then split into two groups representing the two opposing views. Then, each group was given two articles with opposing views on this topic and asked to read them critically. They were advised to use the arguments and data from the article that agrees with their opinion to back up their point of view and also use the other article with the opposing views as a source for possible counterarguments. Then, the two groups gathered among themselves and came to a consensus on what to present for their stance and how to refute the possible opposing views. They were reminded to draw upon their personal experiences or world knowledge to help corroborate their points of view as well. After the class was ready, each group was asked to present their argument, followed by raising opposing views for the other group. Then, the other group had to refute or challenge these opposing views. The debate went well and the students actively participated in the discussion. Interestingly, even the most silent students in the class were observed to actively contribute to the debate.

During the seventh and eighth weeks, students were shown samples of argumentative papers written by professional writers (e.g, opinion pieces written by journal columnists), which gave them a chance to examine the patterns of rhetorical argumentation in the Toulmin model in detail. First, students worked in pairs, using highlighters with different colors to code the different elements of Toulmin model. Then, the whole class discussed their answers with the researcher, who further checked their understanding of the Toulmin model.

During the following two weeks of classes, students were asked to rewrite and revise the argumentative paper written at the beginning of the semester step by step. The main rationale for asking students to write on the same topic is that it would reinforce the concept of the writing process by letting them revise their papers, ensuring the comparability of two versions of the paper while removing the possibility of topic effect. The first step was that students searched information about the topic on the Internet and library database to understand the different perspectives of this issue. Then, after gaining enough materials and information, they were encouraged to organize the information by outlining and were reminded to incorporate all the important Toulmin elements into the outline during the tenth week of the semester. Toward the end of the twelfth week, the students were asked to send their revised paper to the researcher by email.

3. Results and Discussion

The main purpose of this study was to investigate the instructional effect of Toulmin model on Turkish EFL university students' argumentative writing. To answer this question, the overall quality of students' argumentative papers before and after the instruction was assessed by two raters, following a 5-scale holistic scoring rubric developed and validated in Qin and Karabacak (2010) (See Appendix A). This rubric drew upon both McCann's (1989) rubric and Nussbaum and Kardash's (2005) one, which included

the following three dimensions: the overall effectiveness of argument, overall organization, and language use in general. The two raters were the researcher herself and another experienced English academic writing instructor. The final score for a student's paper was the average of the two grades given by the raters. If the difference was larger than 1, they discussed their ratings and reached an agreement.

Table 1 presents the descriptives of overall quality of the papers before and after instruction. As shown in Table 1, the students' papers improved after the instruction in terms of their overall quality. It should be noted that since the study had a relatively small number of participants, it was not appropriate to conduct any inferential statistics to see whether there were any significant statistical differences between the overall quality of the papers before and after the instruction.

Table 1. Descriptive Statistics for the Overall Quality of English Argumentative Papers, Descriptive Statistics (N = 16)

Overall quality	Mean	SD	Min	Max	
Before instruction	2.54	1.36	1.0	4.5	
After instruction	3.45	1.24	2.5	5.0	

Meanwhile, the study further analyzed the Toulmin elements in the students' papers before and after instruction to examine whether there were any changes in the use of these elements. Specifically, the students' papers were coded by the researcher regarding the frequency of claims, data, counterargument, and rebuttal occurring in each paper. Due to the extremely low count of warrants, they were not considered in this study. Table 2 reports the descriptives of the use of the Toulmin elements per paper on average. Before instruction, not many papers included counterargument and rebuttal as indicated by the low values in the mean. However, after instruction, every paper presented more use of claim, data, counterargument, and rebuttal, as evidenced by the fact that the means of all these four elements were greater than 1.

Toulmin elements	Papers before instruction		Papers after instruction	
	Mean	SD	Mean	SD
Claim	.98	1.07	1.47	1.23
Data	2.14	1.45	3.06	1.75
Counterargument	.50	.81	1.24	.68
Rebuttal	.37	.79	1.04	.89

Table 2. Descriptives of the Use of Toulmin Elements in Students' English Papers

These findings suggest that the instruction of Toulmin model produced positive effects on helping Turkish students' argumentative writing, which is consistent with Bacha (2010) and Varghese and Abraham (1998) in that students' papers presented more explicitly stated claims and complex argumentation structures. A quick examination of actual student papers would reveal the effectiveness.

Before instruction, many students were found to show reluctance to express their clear point of view, and instead majority of their writing discussed both sides of the controversial issue. The Turkish students' lack of clear thesis in argumentative writing has also been reported in Alagözlü (2007) who analyzed Turkish EFL university students' English essays and found that they often failed to present their point of view clearly. After the instruction, they understood that their point of view should be clearly stated rather than straddle in the middle. The following two verbatim excerpts from the same student writer demonstrate the thesis or lack thereof written before and after the instruction:

(Before instruction) Nowadays, we live in a society that depends on information and communication to keep moving in the right way, so media plays a huge role in our lives. Besides, the media's good influences on people, many people against media because of its harmful effects on people.

(After instruction) Since the development of technology, lives start to change day by day. Everything began to become much more easy and enjoyable. Television is the one of the most important gadgets that affects and changes people's lives in many ways. Thanks to this magical gadget, people's lives become more colorful and knowledgeable because they can find many funny thinks to enjoy and news to become aware of what is going on in the world. However, by time it started to become the big part of human's lives. <u>Although some people disagree, I strongly believe that the mass media plays an important role in shaping people's opinions, especially young generations.</u> (thesis statement)

The above-mentioned two excerpts clearly show that the student chose a stance to take after the instruction, whereas she failed to do so in the beginning. This change has significant implications, as Turkish students are often reported to conform to the authority and printed texts due to the traditional educational system where individual voice and critical thinking are often neglected (Erdogan, 2003; Sert, 2006). The finding suggests that students were more willing to express their point of view after the instruction, an important step toward cultivating the critical thinking skills.

Another improvement was observed in students' papers regarding the use of evidence. In the beginning of the semester, student papers were full of personal opinions with little support or evidence. Even if there was some kind of evidence, they mostly came from personal experiences. After the instruction, students were more aware of different types of evidence or data that can be used to corroborate their point of view, and their papers provided more sufficient and a greater variety of evidence, as illustrated in the following excerpt from a student's paper.

In addition to these, media affects young people's preferences. Young take TV series characters as a role model. [*Caim*] For example, young people are affected by some people they watch on TV. For instance, in the study with 1020 students from 5 different high schools in Istanbul maintained that as a basic reality, two students out of three want to resemble one of the series characters. As a result, these students try to dress up like these characters in order to resemble them (Erjem & Çağlayandereli, 2006). [*Data*]

In this excerpt, the student was able to utilize research results as an evidence to support her point of view that young people are deeply affected by the media, especially TV series. Such kind of evidence or data was not seen in this student's paper before the instruction. This partly explains why students' argumentative papers were not strong or convincing enough in the beginning of the semester, that is, they failed to provide effective data to corroborate their points of view. Similarly, Qin (2011) found that the Turkish EFL university students often resorted to their personal experiences to support their point of view; other forms of evidence that are more favored in the academic community, such as research articles, statistics, and citing authorities were rarely used. The change of students' employment of more variety of evidence in their argumentative writing exhibited the effectiveness of the instruction.

After the instruction, the students were also found to include the use of counterarguments and rebuttals, which were almost non-existent in the papers before the instruction. The argumentation in their revised papers were much more enriched and complicated by including counterargument and rebuttal. They were able to incorporate possible opposing views and refute them with forceful and strong data, as shown in the following excerpt from another student's paper after the instruction:

The opponents of the idea of important role of media in shaping people's opinion say that while they were watching television, they can evaluate the programs because they know is it real or not. [Counterargument] However, as it is known by majority of people, the big population of Turkey is not well-education people, so they may not separate the programs which one more realistic or not. [Rebuttal]

Another idea that opponents support is that TV channels are under the control of RTUK, so programs that they present are all safe to watch. [Counterargument] However, almost it is impossible to control them and as every people can see, even in cartoons, there are many things that children and young teenagers can affect easily. [Rebuttal]

In this except, the student included two possible opposing views and further refuted them. A quick examination of her prior paper showed that she failed to incorporate any opposing views before the instruction, not to mention challenging the opposing view. In fact, a number of studies (e.g., Nussbaum & Kardash 2005; Qin & Karabacak, 2010) have shown that the use counterargument and rebuttal enhanced the overall quality of argumentative writing. This partly explains the better quality of students' papers after the instruction because of the inclusion of these elements.

Although not the focus of the present study, students' attitudes toward the effectiveness of instruction were also obtained at the end of the semester through informal group interviews. Some of them stated that they had learned to pay more attention to differentiating fact from opinions; before the instruction, they always mistook writers' opinions as facts and tended to take them for granted without much questioning, whereas after the instruction, they were able to critically judge statements in a text and make a decision by themselves on whether statements were more factual or opinion-based. They also reported that they were more aware of the need to present their own voice and point of view supported by reasoning, which took a variety of forms. Before they tended to support their opinion with their personal experiences or anecdotes; however, now they learned to utilize other forms of evidence to warrant their point of view, such as research studies and factual statistics. Particularly, students expressed that with the knowledge of the Toulmin elements after instruction, they understood the basic elements expected in typical English argumentative writing, and therefore felt empowered to write argumentative papers in the future.

4. Conclusion

This small-scale classroom-based research has lent another empirical support for the effectiveness of the instruction of the Toulmin model on helping EFL university students' argumentative writing. The improvement lied in students' deeper understanding of crucial rhetorical patterns in English argumentation and their incorporation of these elements into their own writing. The step-by-step activities used in the current study proved to be useful in scaffolding students' growth as independent writers as well. One important pedagogical implication is that Toulmin model, the well-accepted English rhetorical pattern in the L1 contexts, can be introduced and taught to L2 writers from different cultural backgrounds.

Admittedly, several drawbacks exist in the study. The number of students was small and the study took place only in one Turkish EFL university context, and therefore future studies with more participants and different educational settings are suggested. In addition, students were asked to write on the same topic after instruction in the current study. Future studies investigating the instruction effect of the Toulmin model on different topics are recommended to expand the generalizability of the results.

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Appendix A

A holistic Scoring Rubric for English Argumentative Papers

Scale 5: An excellent persuasive argument. The paper states a clear point of view and gives good and sufficient reasons to support it. The reasons are clearly explained and well-elaborated by using convincing information/examples. The paper may present reasonable opposing view(s) and also refute the opposing view(s) appropriately, though they are not required. The paper is well-organized and sequenced. It demonstrates effective word choice and contains few or no grammar/mechanical errors.

Scale 4: A reasonably good and persuasive argument. The paper states a reasonably clear point of view and gives generally plausible reasons to support it. The reasons are explained and elaborated to some extent, though not enough. There may be one or two inconsistencies or pieces of irrelevant information. The paper may present some opposing point of view(s), but may fail to refute them or the refutation may be ineffective. The paper is generally well-organized and flows well, and shows evidence of effective word choice overall. There might be some grammar/mechanical errors, but they do not impede overall communication.

Scale 3: A clearly recognizable argument but limited in effectiveness. The paper states a point of view and gives one or two good reasons to support it. The reasons are not explained or supported in a fully coherent way. The reasons may be of limited plausibility and some inconsistencies exist. The organization is not well-developed, and ideas could be better sequenced. There might be some major problems in word choice; a noticeable number of grammar/mechanical errors occur.

Scale 2: A minimally acceptable argument paper, though not persuasive. The paper states a point of view but only one good reason is provided to support the point of view; or the reasons given are unrelated to or inconsistent with the point of view; or the reasons are incoherent. The organization is weak and ideas are not sequenced well. The paper demonstrates limited control of written language. There are numerous word choice, grammar and mechanical errors, and communication is impeded by these errors.

Scale 1: An ineffective argument with major gaps in reasoning. The paper states some sort of a point of view, but it is vague or general. No reasons are provided for the point of view; or the reasons given are unrelated to or inconsistent with the point of view. Most of the content of the paper is not relevant to the task. The paper is not properly organized, and it just contains piece meals of list of phrases or sentences with no coherence. There are so many word choice, grammar and mechanical errors that communication is severely impeded by these errors.