



Examining Students' Performance In Argumentative Genre At Undergraduate Level

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Abstract

This study made an attempt to examine students' writing performance in argumentative genre by engaging them in small group discussion and writing activities based on argumentative short fictions having unresolved issues of murder and suicide cases. Participants of this study were N= 64 with age between 21 and 22, enrolled in semester four at University of Swat. Being a quasi-experimental study, participants of the study were assigned to control group and experimental group non-randomly. To mitigate the issue of observable variables, an informative questionnaire was administered for the selection of participants before the pre-test; those found similar on all observable variables were given pre-test. For data collection, this study used survey questionnaire (PSM), pre-test, post-test, group writing activities and small group discussion, and to explore the depth and breadth of the study a semi-structured interview was conducted on the key informants. For measuring the scores made on the pretest and post-test, adapted analytical scoring rubrics were used, which were also employed as instruction guide. To compare the means score of the two groups, independent t-test was used. Thematic analysis was applied for data collected through group discussion and semi-structured interview. The findings of the present study indicate that group discussion broadened students' critical thinking and to some extent their argumentative skills and helped them interpret the texts from different dimensions and using sign warrant, causality warrant and other clues, they were able to resolve the complicated and complex issues of murder and suicide. In addition, this study found that with students arguing and discussing on controversial issues can develop effective argumentative skills from each other without explicit instruction. Results from

interviews shows that students felt confident to write and argue on controversial issues. Another common pitfall, this study found was that of basing their claim on assumptions and hunches which was found to be indefensible, because they ignored collecting data which is an integral part of argumentation process. This study suggests that critical and complex issues related to real life situations need to be applied so that students can work hard cognitively and analytically to develop disposition for argumentation in order to resolve controversial issues.

Keywords: Argumentative genre, murder and suicide short fictions.

1. Introduction

It is imperative in today's world to be able enough to make good argumentation. Kuhn (1991) considered argumentation to be a thinking skill essential to idea formulation, problem-solving, and good judgment. However, to compare this critical skill to other skills in education few empirical studies have focused on developing argumentative skill (Lukomskaya, 2015; Nussbaum & Schraw, 2007). Fundamentally, good arguments have two sides: claims and counterclaims (Nussbaum & Schraw, 2007). In argumentation, integration of Claims-counterclaims is found to be more credible in writing, for the writer appears to have more knowledge and is less biased (O'Keefe, 1999). More precisely, argumentative writing is the process of making a claim, challenging it, supporting it with reasons, questioning the reasons, rebutting them, and finally reaching a conclusion (Kuhn, 1991). Toulmin, Rieke, and Janik (1990) propose a similar model of argumentative writing that includes evidence, claim, warrant, backing, and rebuttal.

In addition, producing literate people, the other important goal of education is to inculcate such dispositions and skills in students that encourage their participation in political issues, institutional issues or on controversial issues besides developing their capacity to produce a thoughtful argumentative writing (Ferretti, Andrews-Weckerly, & Lewis, 2007). Argumentative writing cannot be promoted in a society where there is no free intercourse and communication of experience to freely participate or talk on the controversial issue. This has been substantiated by national assessment of educational progress (NAEP) (2002) conducted in the USA, survey which reports that most of the students do not possess the capacity and ability to defend their position by valid and effective arguments. For example, only 17% of the fourth graders (Persky, Daane, & Jin, 2003), 18% of eight graders and 31% of the 12th grade students produced argumentative essays that were judged to be "skilful" or better (Nelson, Rosenberg, & Van Meter, 2004). In most argumentative writing samples, especially those with learning disability, it is found that smooth transition from one argument to another are lacking, and do not consider alternative viewpoints which are likely to reduce the effectiveness of their writing (Graham & Harris, 1989b; Graham, Harris, Fink-Chorzempa, & MacArthur, 2003).

A study was conducted by Ponnudurai (2011) in Malaysia to compare two different modes of presentation namely interactive online reading (IOR) and traditional print

reading (TPR), and their effect on developing argumentative writing. The findings of the study indicate that students with the interactive online reading performs better written tasks and also produce more essays with good thesis statement, their counter argumentation was not well directed to support their claims, remain underdeveloped. However, the findings of the study are statistically significant. It is confirmed by the findings of another study that majority of the students only produced “One-sided argumentation” while ignoring the “other-side information”. The results show that presenting arguments only of their side accounts for 71% of all poor rating (27/38) and nearly 40% of all ‘average’ ratings (14/35), (Wolfe, Britt, & Butler, 2009). People often tend to produce one sided argumentation, for this researchers have presented certain reasons, for example “cognitive laziness”, “economy of effort”, insufficient ‘perspective taking’, it is for the fact that human being often prefer “mental short cuts” over logical thinking and thoughtful consideration of alternatives(Reed, 2010, pp. 346-347). This phenomenon is likely to take place when people are occupied in making decisions to solve problem and under the pressure of time constraints as well (Reed, 2010).

This clearly points to the need of effective instructional intervention to develop argumentative writing (Ferretiet al.,2007). Getting mastery over certain genres puts one at the advantage over those who do not have, and instils power and vigour into one’s writing. For example, students getting mastery over different genres of writing are at an advantage over those who are not capable of mastering over these genres. One of the most essential genres needs to be developed or learned by all students irrespective of their level of proficiency is argumentative genre.

Doing argumentative writing or arguing on one’s stance is a complex activity, which requires extensive practice using cognitive abilities; critical, analytical and creative thinking skills. But unfortunately, due to its complex and demanding nature it is often avoided and most writing courses are focused on composing only general text. This is why argumentative writing skill remains underdeveloped, though it serves as a tool for students and an important tool for free society where people pass critical judgments and comments on ethical, political, and social issues (McCann, 1989). McCan found that most elementary schools evade argumentative writing tasks, while secondary try to avoid argumentative writing skill until 11th grade. A study was conducted (Knudson, 1992a), consisting of three fold investigations: 1. to examine the efficacy of four instructional approaches on student argumentative writing at the 10th- and 12th-grade levels; (2) to explain the differences among the two grade levels student writing based on essays writing at three different times; and (3) to examine how various essays characters affected the raters' verdicts with overall scoring. The results of the study indicate that the differences in the effectiveness of four strategies were not significant, though these instructions were accompanied by a model essay, scales questions and free writing activities. The findings further indicate that scoring of grades 10th and 12th was not significantly different even when they used holistic scoring rubrics based on Toulmin (1958) model argument. The six parts of Toulmin Model of Argument are as follows:

Data: The evidence or facts required to verify the argument

Claim: The statement under consideration (a thesis)

Warrants: The general, hypothetical (and often implicit) logical statements that behave as a connection between the data and the claim.

Qualifiers: Statements that limit the strength of the argument or statements that suggest the circumstances under which the argument is considered true.

Rebuttals: Counter-arguments or statements indicating circumstances when the general argument is not considered true.

Backing: Arguments that assist to support the warrants (i.e., arguments that don't essentially verify the key point under consideration, but which do verify that the warrants are true.)

An illustrative example based on Toulmin model of argument is given below extracted from *The Shape of Reason* written by John Gage in which the different parts of an argument are stated:

Congress should ban animal research (Claim #1) because animals are tortured in experiments that have no necessary benefit for humans such as the testing of cosmetics (Data). The well-being of animals is more important than the profits of the cosmetics industry (Warrant). Only congress has the authority to make such a law (Warrant) because the corporations can simply move from state to state to avoid legal penalties (Backing). Of course, this ban should not apply to medical research (Qualifier). A law to ban all research would go too far (Rebuttal). So, the law would probably (qualifier) have to be carefully written to define the kinds of research intended (claim #2).

However, both 10th and 12th graders displayed suggestively more argumentative traits in their writing (warrants and data). On the whole, relatively few students responded or incorporated responses to the opposition in their writing, which means warrants and data used by these students were most likely affected by their topic knowledge. The findings of the study suggested that students of grades 10th and 12th who used varied components of argument were relatively strong, hence these differences may be attributed to the amount of knowledge they possessed prior to the test about the topic. The findings of the previous research studies (Knudson, 1992b) are confirmed by this study that instructional strategies that have been proven or found effective with descriptive, narrative and informational writing may not work effectively with argumentative writing.

However, in exception to the study presented above, there are several recent studies in Asia, in support of the present study using rubrics serving as guides for developing

narrative, descriptive and argumentative writing. For example, a study conducted by Lu and Zhang (2013), at public funded Hong Kong high school, to investigate that writing and assessing written arguments of others using rubrics is important and helpful, because it can help students to present better arguments in their writing. The objective of the investigation is to observe whether students could produce better arguments when assessing their peers online written arguments using some rubrics. In this study, students used rubrics to evaluate arguments along four factors (evidence, claims, reasoning, and knowledge application). This process was followed by comparing their teachers' assessment with that of their own using the same rubrics. This was based on student-teacher agreement on four dimensions of rubrics. Besides, evaluation comments and perception formed by students based on assessment activity were also taken into consideration. The observations of the study show that the quality of arguments can be anticipated based on the agreement on rubrics dimensions, students' comments recognizing problems, evidence and reflection on assessment. Thus, the study indicated that students evaluating the written arguments of their peers using rubrics can lead to producing or writing better arguments.

This paper is part of doctoral thesis (research), conducted on the three genres in sequential order. However, this paper focuses only on the argumentative genre. The aim of this paper is to examine and develop students' critical thinking skills through argumentation based on Toulmin model of argument using the six parts of the Model. Because argument lies at the heart of critical thinking and academic discourse, and the kind of writing students require improving for the success in their academic and professional life. While one being engaged in argumentation, he/she is supposed to use logic and evidence to convince the audience by bringing in valid proof in support of the claim. It is believed that students by nature are argumentative. They argue with their peers, parents, and siblings. However, they are not always able to support their arguments by valid evidence or acknowledge opposing viewpoints. This study tries to develop students' argumentative writing skills so that they may argue logically and thoughtfully in academic and real life situations. In order to develop this disposition, they need small group discussion and argumentation based on controversial issues coupled with explicit instructions and feedback on their written drafts and spoken discourse, so it seems unlikely to develop such skills by themselves. Learning to write or argue logically and thoughtfully, depends on the teacher explicit approach to instruction and how they prepare students to broaden their knowledge, develop ideas, and communicate them effectively utilizing the authentic and relevant evidence. It is a process of inquiry, with the aim of searching the truth and knowledge.

2. Research Objectives

- To improve students' performance in argumentative genre and develop their disposition for argumentation.
- To develop students' argumentative writing skills through short fictions based on unresolved cases of murder and suicide

3. Research Question

Q.1: Does explicit teaching and techniques of argumentative genre lead to the development of good argumentation in discourse and written text?

Q.2: How do short fictions based on controversial and unresolved cases of murder and suicide develop students' argumentative skill?

4. Methodology

4.1 Research Design

The focus of this study was on examining the students' argumentative writing skill; it was deemed necessary to choose a mixed-method design while utilizing quantitative instruments for data collection in order to produce useful results. The present context under which this study was conducted (University of Swat) required non-random sampling; the intact groups. In situations where random assignment or re-assignment of participants creates disruption in the learning process, quasi-experimental study designs are normally employed (Creswell & Garrett, 2008). Therefore, this study used a quasi-experimental study design as in most educational settings, random assignment is not possible. Participants of this study were BS four years program, aged between 21, and 22. The assignment of students to control and experimental groups was carried out non-randomly. Teaching to the Control group was lecture-based, where students did not perform any group discussion or writing activities. Whereas, students in experimental group involved in argumentations with other students to arrive at the conclusion whether it was a murder case or suicide case and performed different writing activities as well. A Quasi-Experimental like experiment design tests a causal hypothesis in which a program or policy is seen as an "intervention" and is tested on how well it works or achieves its objectives.

To take into account the ethical consideration; this study distributed a self-designed survey questionnaire based on Propensity Score Matching (PSM) to pick up those students who are equal on all observable variables followed by a pre-test to Control and Experimental groups. This study picked up a control group as a comparison group which was as similar as possible to the treatment group in terms of baseline characteristics (White & Sabarwal, 2014). These students argued and interacted with other students while supporting their respective claims and performed group writing activities. The results obtained from the pre-test were analyzed using analytic scoring rubrics. The experimental group was exposed to treatment for a period of six weeks, during which period they argued on the topics and carried out group writing activities. An independent t-test was employed for pre-test in order to compare the means of the two groups. A post-test was applied at the end of the treatment. The results collected from the post-test were evaluated using analytic scoring rubrics. An independent t-test was applied to compare the mean scores obtained from the post-test between the two groups.

Based on the sampling methods adopted, both qualitative and quantitative instruments were used for data collection. The main instruments this study employed were as PSM survey questionnaire, pre-test, post-test, semi-structured interview. Activities in the intervention consist of argumentation/interaction among students and group writing activities based on argumentative short fictions as source texts.

5. Results of the study

In order to select students who are similar on all observable variables, a Propensity Score Matching (PSM) survey questionnaire was administered to seven faculties. ANOVA test was applied to seven faculties to figure out the overall differences among them, It was found that students in these seven faculties were similar on almost all observable variables with a $P = 0.651$ as illustrated in table 1.1. No significant difference was found among the 7 faculties as shown in table 1.1

Table 1.1 Means scores of the Seven Faculties

Source of variation	Sum of Square	Degree of Freedom	Means Square	F	P= Value
Between Groups	0.161416 991	6	0.026902832	0.698606445	0.651128335
Within Groups	5.814901 428	151	0.038509281		
Total	5.976318 419	157			

Four faculties; Faculty of Pakistan study and Faculty of History as Control Group, Faculty of Political science and Faculty of Management Sciences as experimental group were selected for the intervention. An independent t-test was applied to compare the mean score of the two groups (experimental and control) on their pre-test in order to find out their language proficiency for the intervention. Table 2.2 shows that there was no significant difference between the mean scores of the two groups with $p > .05$. Therefore, the two groups were almost at the same level of writing proficiency before the treatment.

Table 1.2 Independent-Samples T-Test of Pre-Test Scores for the Two Groups

Group	
EG (n=33)	CG (n=34)

Argumentative Genre	Mean	SD	Mean	SD	t	p value
Slip or Trip	21.20	11.20	21.46	6.32	.752	.450
What happened to Winston	19.49	11.05	24.49	7.01	.030	.960
The death of the Musician	18.57	7.39	19.03	5.69	.210	.820

To answer the research question, a post-test was applied to the two groups at the end of the intervention to evaluate if the intervention made any significant difference to the students argumentative skill in terms of defending their claim. For longer-term effects of the study, researchers prefer delayed post-test in comparison to immediate post-test (Mackey & Gass, 2015). This is because one gets a wider snapshot of the treatment effects. Besides, it measures the change caused by the treatments (Dimitrov & Rumrill, 2003). The results indicate that the experimental group did not perform well in all the three prompts as shown in the table.

Table 1.3 Independent-Samples T-Test of Post-Test Scores for the Two Groups
CG (n=31) EG (n=32)

Argumentative	Mean	SD	Mean	SD	T	P value
Slip or Trip	23.88	8.17	31.92	9.92	3.24	0.002
What Happened to Winston	23.92	8.94	30.28	13.40	2.042	0.046
The Death of the Musician	21.08	8.03	26.00	12.64	1.695	0.096

An independent t-test was applied to compare the mean scores of the two groups for the three prompts in the post-test. The results of Table 3.1 show that the EG students made a significantly higher mean scores in the post-test than CG students for all the three genres of writing with $p < .05$. First, the mean score for Slip or Trip prompt stands at $M=31.92$, ($SD=.9.92$) by EG and $M=23.88$, ($SD=8.17$) by CG, $t=3.242$, $P=002$, with the mean difference of 7.96, indicating that there is a statistically significant difference in the mean scores for prompt (Slip or Trip).

Second, a significant difference with the mean score of $M=30.28$, ($SD=13.40$) was found in EG for prompt second while the CG mean score stands at 23.92, ($SD=8.94$); $t=2.042$ with the mean difference of 6.36. Third, there is a statistically significant difference in the mean scores for prompt three of the EG who obtained $M=26.00$, ($SD=12.64$) and CG who obtained $M=21.08$, ($SD=8.03$); $t=1.695$, $p=002$, with the mean difference of 4.92.

Hence, the results from Table 3.1 show that the score gained by EG students for the prompt one is significantly higher than CG students. However, the two groups were not as much significantly different for the prompt three. It might need a lot of thoughtful consideration and deliberation, and understanding of sign and causality warrants which they could not retrieve. Besides, prompt no three was more complex and of complicated nature than the rest of the two.

6. Discussion

Based on the claims from the researcher and the findings of previous research, students in the experimental group were expected to perform significantly better than those in the control group for all the three prompts being different in nature and level of difficulty. However, significant result regarding the last prompt was not achieved by the present study. Why did not EG students do better for the last prompt in the post-test, was of particular interest to the researcher? Besides, the researcher incorporated the said prompt on purpose so that students' critical and argumentative skill may come to the fore, since the required skills during the treatment period have been emphasized and highlighted. However, certain reasons may help explain the non-significant result. First, it may be that the small sample size leads to the result that is statistically non-significant. Second, it is possible that the treatment for the two and half months was not long enough for the students to transfer their writing ability into individual writing ability. For example, if they could practise argumentative genre more than two and half months, the effect of genre features on their individual writing performance could possibly appear. Third, it might be that they had little exposure to argumentative genre may help explain this phenomenon. Although the students claimed that they did better for all the three prompts, with an apparent improvement from 18.12 to 26.21, when an independent t test was applied. It was found that the average increase in the mean scores was not significant with $P > 0.05$.

Fourth, it might be that the participants were not used to the techniques of argumentation like making claim and supporting the claim with sufficient data and to address the counterclaim. To improve their argumentative writing, these students are required to do extensive practice on argumentative genre so as to develop disposition for argumentation. Before intervention, these students knew only definition of genres but not the features of the genres.

Fifth possible reason, it might be that the dispositions or skills required of students for argumentation was not inculcated in them, as to defend their point of view on a controversial issue. Thus, they are supposed to develop the capacity to produce a thoughtful argumentative writing. In other words, they have been groomed in the teacher centred system where there is less likelihood of argumentation between teacher and students on controversial issues, hence developing disposition or capacity of thoughtful argumentation in this short time was beyond the students' capacity. This phenomenon can be substantiated by a survey conducted in the USA by National Assessment of Educational

Progress (NAEP) (2002) report that most of the students do not possess the capacity and ability to defend their position by valid and effective arguments. For example, only 17% of the fourth graders (Persky et al., 2003), 18% of eight graders and 31% of the 12th graders produced argumentative essays that were judged to be “skilful” or better (Nelson et al., 2004). Most of the students were not considering alternative viewpoints which diminish the effectiveness of their argumentative writing (Graham & Harris, 1989b; Graham et al., 2003).

A study was conducted in Malaysia by Ponnudurai (2011) to compare two different modes of presentation IOR (interactive online reading) and TPR (traditional print reading), and their effect on developing argumentative writing. The findings of the study indicate that students with the interactive online reading performed better written tasks and also produced more essays with good thesis statement, but counter argumentation was not well written to support their claims, and thus remained underdeveloped. This was supported by the findings of another study that show majority of the students ignore ‘other-side information’, “One-sided argumentation” accounts for 71% of all poor rating and nearly 40% of all ‘average’ ratings (Wolfe et al., 2009).

7. Conclusion

The findings obtained from this study support the claim made by Nussbaum (2007), that “argumentation” is all inclusive term encompassing any type of reasoning or cognitive activity that one uses in academic discourse or social setting. Be it debate on a controversial issue, collaborating, and critiquing are all considered parts of argumentation.

Considering the insignificant scores gained by the experimental group for the last argumentative prompt and the slightly significant scores for the first two prompts suggests that students have not yet developed disposition for argumentative genre. It is pertinent to say that prior to the treatment, these students had no familiarity with the argumentative genre nor any understandings with its characteristics, if any it was limited to its definition.

However, this study helped them develop some awareness of the specific features, conventions and mechanics of argumentative genre. And discussion in small groups based on the controversial issues broaden their imaginative thinking, also helped them interpret the texts from different dimensions. Using causality warrants, sign warrant and clues, they arrived at the logical conclusion. The findings of the present study suggest that treatment duration needs to be extended to at least one full semester so that they may internalize the disposition for argumentation and develop familiarity with genre features and mechanics.

The findings of this study correspond with the study conducted by Anderson et al. (2001) that arguing and discussing on controversial issues can develop effective argumentative skills from each other without explicit instruction. Results from interviews shows that students felt confident to write and argue on the controversial issues.

A common pitfall seen in their argumentation and writing was the claim or thesis statement they made was indefensible and did not represent an argument. It should be instilled in the mind of the students that collecting data regarding any issues is an integral part of inquiry process meaning that students should collect data before making claims. Because basing their claims on assumption or hunches without collecting data may in turn create problems for them to substantiate their claims with evidence. This supports the claim made by Lucy (2011) that claim should include the counterargument within them. Hence, it is a good approach towards teaching students that strong thesis statement at the start may prevent them from writing something which has no real opposition or potential to present argumentation

This study also suggests that short fictions based on complicated and controversial issues with the pictures giving clues, sign and causality warrants may be employed in writing classrooms so that students may learn how to find out solution to a given problem. This will not only belimitedto their academic life but also their professional life as well.

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