

## Applying Multiple Intelligence-Based Activities (Miba) to Promote Students' Writing Performance

Dahlia Husain

Fakultas Ilmu Budaya, Universitas Muhammadiyah Gorontalo

### *Abstract*

*The present study was conducted based on the assumption that accommodating students' differences in classroom setting will lead to students' success particularly in language learning. This research was aimed to investigate the extent of the application of Multiple Intelligence-Based Activities (MIBA) to promote students' writing performance. There are 2 homogenous groups of the 4<sup>th</sup> semester of English Department students of Gorontalo State University enrolled in this study. A total of 40 students from control and experimental group were involved. This study applied quasi-experimental design with pretest and posttest that were given to both groups followed by the perceptual questionnaire to find out the students' perception toward the application of MIBA. The experimentation comprised 8 types of activities as the embodiment of 8 intelligences proposed by Gardner (2011) to be incorporated into students' writing class. The students' writing performance was measured through Jacobs et. al.'s analytic writing scale (as cited in Hughes, 2003) including content, organization, vocabulary, language use and mechanics, while the data from the questionnaire was analyzed through Likert scale measurement. The result of the independent sample t-test revealed that experimental group taught using MIBA showed a statistically significant performance compared to the control group taught using conventional way of teaching with t-observed value was greater than t-table value ( $2.532 > 2.042$ ). At last, the data from perceptual questionnaire strongly suggest that the students of experimental group had positive perception toward the application of MIBA. Therefore, it can be concluded that MIBA gave a positive effect in promoting students' writing performance.*

*Keywords: Multiple Intelligence-Based Activities, analytic scale, Students' writing performance.*

### Introduction

Writing can be perceived as “the symbolic representation of language through

the use of graphic sign” (Yule, 2010). Among other skills in mastering English language, writing seems to be the hardest skill to be mastered (Richards et al., 2002).

This indicates that there are many issues regarding to developing writing skills. Thus, there have been many attempts to overcome the issues regarding with improving students' writing ability, one of the newest one is incorporating the theory of multiple intelligences into the teaching writing. Nonetheless, Kellog et al. (2002) stated the knowledge of correct spelling, grammar, punctuation, and text organization is not enough, especially in university level.

Multiple Intelligences-Based Activities were designed based on Gardner's theory of multiple intelligences to be incorporated in students' writing class to improve students' writing performance in particular to narrative text. The theory of multiple intelligences is proposed by Howard Gardner in 1983. It comes from his dissatisfaction of how intelligence is viewed too narrowly. He proposed that human being has (with them) a set of intelligences that is uniquely combined that makes one person different to another (Gardner, 2011). On one hand, educational system was built upon the idea of intelligence as one's ability to use language or to calculate which predict his future success. On the other hand, one of the fundamental values of Gardner's theory lies

upon the views that human beings can find successfulness in many forms (Gardner, 2003). Gardner contended that the previous theory of intelligence reflects human capacity very limitedly. Furthermore, the theory has promised to provide better understanding about students' differences and how teacher can accommodate those differences especially in the classroom.

The notion of MIBA was to confirm that there is no particular teaching method that suited all the students at the same time; therefore, students' differences need to be taken into consideration. The teaching of writing especially in Gorontalo State University, however, seems to dwell on the students given topic and then write an essay about that topic. Armstrong (2012) refers to this method of teaching as a "dull" way.

Christison (1996) highly recommended the use of MIs method in second language classrooms. She claimed that quality instruction and classroom environment are two things that teachers can control and can cope with students' individual differences. She advocates some classroom activities based on each types of intelligences. Moreover, Richards et. al (2001) advocated that in the sense of MIs, language could be

integrated with music, bodily activity, interpersonal relationship and so on. Language, therefore, is more likely to be communicative rather than to be viewed only from linguistic perspective. Harmer (2004), for example, was incorporating music in his multinational group of adult students and found that students respond differently to one another. Some of them were excited about it, some say not very interesting with the genre of the music, some says it's confusing. This example illustrates that a single method or approaches cannot be suitable for all the students at once.

Several researches have done under the theory of MI. For example, Bas et al. (2010) studied the effects of MIs project-based learning on students' achievement levels and attitude toward English lesson. Yi-an (2010) was undertaking a case study on the extent of MIs which relates to students' learning behavior and their English performance. And lastly, Ahmadian et al. (2012) investigated the correlation of MIs and students' writing performances whilst in this research the researcher is intended to derive some activities under the light of MIs theory to be applied in writing class in order to promote students' writing performance.

Therefore, this study was aimed to provide students' with various activities based on the MIs theory that purposed to cater for students' differences particularly to improve students writing performance specifically narrative essay.

## **Methodology**

### **Location and Research Design**

This research used a quasi-experimental design (Gay et al.: 2006) with one control group and one experimental group. Pretest and posttest were administered to both groups to obtain the data of this research. The MIBA was only experimented to the experimental group, meanwhile the control group was taught by conventional way of teaching (Sugiono, 2010).

This research took place at Gorontalo State University (UNG), Gorontalo province.

### **Population and sample**

The population is the students' UNG, English Department particularly the students of 4<sup>th</sup> semester of Writing III subject. There

are 2 homogeneous groups enrolled in this study namely experimental group and control group. These groups are intact 2 classes randomly chosen out of 5 classes of the 4<sup>th</sup> semester students. Each class consists of 20 students in total numbers of 40 students participated in this research for both experimental and control group. The sample was chosen based on the consideration that the students have studied the basic knowledge of writing in their previous Writing I and Writing II subjects.

#### Data Collection

The instrumentation of this research includes the result of both pretest and posttest and the perceptual questionnaire. The experimentation was held during 8 weeks. The researcher administered the pretest to both control and experimental group. During the application of MIBA, the students are engaged into 6 meetings that reflects the 8 ways of multiple intelligences. The posttest was administered to both groups in order to measure the significant difference on the students' performance. At last, the perceptual questionnaire was given to the experimental group to gain the data of their perception toward the application of MIBA. Likert scale measurement type questionnaire

consisted of 10 closed questions and 4 open questions are used.

#### Data Analysis

Students' writing performance was analyzed using Jacobs et al.'s (1981) writing scale (as cited in Hughes, 2003) that covers content, organization, vocabulary, language use and mechanics. It is obvious that the issue of being subjective appears in scoring writing, therefore the researcher use 3 raters including her to score on both students pretest and posttest. All the raters were trained for two weeks (including weekends) to ensure that they have a higher agreement (Graham et al., 2012) toward analyzing the students' score. The students' score was ranged from "Excellent" to "Very Poor". The percentage of students' score, mean difference between control and experimental group, the standard deviation, and the significance different between control and experimental group was calculated using SPSS 16.

Likert scale measurement was used to analyze the students' perception toward the application of MIBA, the open question, however was analyzed through percentage formula. The students responded to point

scale ranging from the very positive as “Strongly Agree” to very negative response as “Strongly Disagree”.

## Findings and Discussion

### The Result of Students’ Writing Performance of Control Group

Table 1(see appendix 1) showed that in term of overall pretest scores for the students’ of control group, no students were indicated to be classified into Excellent, 3 students (15%) were categorized into Very Good, 3 students (15%) were classified as Good. There is only 1 student (5%) that is indicated into Fairly Good, 3 students (15%) were sorted into Fair, 7 students (35%) were classified into Poor and 3 students (15%) were indicated to be in Poor level.

In terms of posttest, table 1 (see appendix 1) illustrates that 2 students (10%) are categorized into Excellent, 4 students (20%) into Very Good, 2 students (10%) into Good, 4 students (20%) into Fairly Good, 6 students (30%) into Fair and 2 students (10%) into Poor.

### The Result of Students’ Writing Performance of Experimental Group

On the other hand, Table 1 also (see appendix 1) suggested that in term of overall pretest scores for the students’ of experimental group, none of the students were indicated to be classified into Excellent, 3 students (15%) were into Very Good, and 6 students (30%) were classified into Good. Another 3 students (15%) were classified into Fairly Good, 6 students (30%) into Fair and 2 students (10%) were classified into Poor. No students were classified into Very Poor.

In terms of Posttest, 4 students (20%) have managed themselves to be classified into Excellent, 8 students (40%) were sorted out into Very Good, 2 students (10%) were indicated into Good, 4 students (20%) were classified into Fairly Good, and 2 students (10%) were indicated into Poor.

### Mean Score Difference of posttest between control and experimental group

Table 2 (see appendix 2) illustrated that the mean score for control group is 74.05, while the mean score for experimental group is 85.25. It indicates that the experimental group performed better than the control group in terms of posttest. Nonetheless, further statistical analysis need to be carried out to see whether or not the

difference is significant. The statistical analysis needed for such test was Independent Sample t-test.

Independent Sample t-test for posttest score of control and experimental group

The difference is indicated to be significant if the observed significance is lower than 5% at level of significance and is not if the observed significance is higher than 5% at level of significance. Table 3 (see appendix 3) showed that the observed significance (sig. 2 tailed) is .016 which is lower than 5% level of significance (.016 < .05). It can be said that due to the result of the independent sample t-test that showed a significant difference of mean between control and experimental group, the null hypothesis ( $H_0$ ) was rejected.

Moreover, table 3 (see appendix 3) illustrated that the t-observed value is greater than the t-table value, in which t-observed is 2.532 and the t-table is 2.042 at 5% level of significance ( $2.532 > 2.042$ ) at 38 (df). This comparison resulted that the mean score of posttest between control and experimental group is in significant difference. Therefore, the evident rejected the null hypothesis and accept the alternative hypothesis ( $H_1$ ) which

implies that there is a significant difference between the students taught by Multiple Intelligences-Based Activities (MIBA) and students' taught in conventional way.

Students' Perception toward the application of MIBA

The application of MIBA gained a positive perception from the students of the experimental group. The students appeared to be agreed that they performed better in terms of writing when MIBA was applied (see appendix 4).

This research revealed that the application of Multiple Intelligence-Based Activities promotes students' writing performance. Moreover, the students had a positive perception toward the application of MIBA.

Some of the findings are indicated to be in partial accordance with a number of previous studies (Bas et al. (2010), Yi-an (2010), and Ahmadian et al. (2012)), which support that MI-based learning does improve students' performance. Bas et al. (2010) investigated the effects of MIs Project-Based Learning on students' achievement levels

and attitude toward English lesson and found that the experimental group taught by such method appeared to be both more successful and have a higher motivation in learning English compare to the control group. This study supported by Bas et al.'s (2010) finding as the experimental group was also performed significantly better than the control group. Bas et al. (2010) in their study were attempted to model eight ways of learning English lesson based on MI theory, and by drawing connection from students' MI profile to their projects learning in which the project-based itself was drawn based on students MI profile. The activities administered to the experimental group during the application of MIBA were entirely based on the theory of Multiple Intelligence and the focus of the study which is writing performance.

The activities presented on this study were orchestrated according to eight types of intelligences and suited a particular text type chosen for this study which is narrative text. Written documents such as fairy tales, visual materials like picture-aided series, examples of natures, group works, individual tasks and musical activities were used in order to address different types of intelligences to

students' writing subject. The encompassment of these different activities into students' writing subject was aimed to serve students' differences into classroom setting. Such encompassment was expected to particularly improve students' writing performance. The independent t-test analysis proved that it did, the students' of experimental group performed significantly better than the students of control group.

As has been stated previously, the activities used in the present research were prepared according to Gardners' MI-theory (Gardner, 2011). The researcher was creating activities based on the theory to tap the students' difference in teaching and learning process. This view is also reflected in Larsen-Freeman (2000) that states teachers who recognize the MIs of their students need to take those information into the classroom.

Unfortunately, finding this view being applied in the classroom is rather difficult. As what happens in Gorontalo State University for example, especially for the writing class at English department, the students are used to the conventional way of teaching in which students' are given topic and are asked to write an essay about the

topic. This monotonous method resulted on the students' static performance. This static performance of students' writing was revealed when the preliminary study was conducted. The writing lecture in charge admitted that the students who are classified into "Very Good" are always the same students. Fortunately this condition changed after the experimentation of MIBA. It is reported from the findings (see appendix 1) that before the experimentation no students were indicated to be categorized into "Excellent"; however, after the experimentation 4 students have managed to launch themselves at "Excellent", and the number of the students who are categorized into "Very Good" level have increased from only 3 students on the pretest to 8 students on the posttest.

Musical intelligence was also incorporated alongside interpersonal intelligence. As Richard et al. (2001) suggest that in the sense of MI, language can be incorporated with such thing. During the experimentation of these two intelligences, the students showed a great deal of changes in their mood since the song was intentionally picked to suit their age and current interest. They were so eager in doing

the activities every step of the way. During the discussion, the students seemed to be motivated and encouraged to complete their group task. This suited the motivational theory proposed by Dornyei (2001) who stated that when the students are encouraged and motivated, they are positively forced to perform their maximum effort.

As one side of the extent of MIBA promoting students' writing ability have been profoundly explained, it will only be fair if the researcher unfolds the other side. On one hand, the application of MIBA has significantly improved students' writing performance. On the other hand, the researcher would like to admit that preparing the activities had not been as pottered as it looks. Some theories have supported this notion that preparing an MI-based learning will consume the teachers' time. Not to mention the fact that a lot of things need to be taken into consideration as Christison (1996) stated that in terms of preparation, MI-based learning does take a lot of time, planning, organization and arrangement. Finally, the researcher admits that connecting the theory of MI to language learning is still problematic, as Richards et al. (2001) stated that due to its recent



application to language teaching, numbers of flaws with the basic elements of MI theory to language theory is unavoidable.

At last, the data obtain from the perceptional questionnaire strongly suggest that students of the experimental group have a positive perception toward the application of MIBA. Table 4 (see appendix 4) clearly showed that the biggest number of total score of students' response which is 515 was attained from the students' response of "Agreed". This indicated that the students do agree that MIBA promote their writing performance. Each question from the questionnaire was determined to exemplify the third research question which is to find out students perception toward the application of MIBA. The analysis revealed that the experiment method (MIBA) applied has enabled the students to develop a positive perception. As stated by Larsen-Freeman (2000) that by recognizing the MIs of their students, the teachers acknowledge that students bring with them specific and unique strength of their own. Most of the students were convinced that knowing their intelligence profile helped them a lot to understand their area of strength and weaknesses.

## Conclusion

This study has researched the implementation of Multiple Intelligence-Based Activities to promote students' writing performance particularly narrative essay. This study has proved that MIBA does improve students' writing performance. Based on the findings and discussion on earlier part, conclusion and suggestion can be drawn. First, this study strongly suggested that the application of MIBA leads to significant improvement of performance of the students. Second, positive comments that has been addressed by the students to the application of MIBA has exaggerated the fact that there are no single method of teaching that is suitable to all types of learners and that this method is highly recommended.

Nonetheless, some suggestions are given for further application or replication of this research. First, the risk of having experimenter biased is the reason why further research should contemplate to make the researcher only as observer. Second, the type of the text used in this study is narrative text. Despite the fact that narrative essay has

not been researched as many as other type, the researcher suggested that further replication should be applied in other type of essay. At last, the focus of this research is solely on teaching writing and improving students' writing performance. Further research and investigation is advised to

integrate all the skills instead of focusing on one skill only. The result might expand the application of MI-based activities (MIBA) itself to be used in integrated skill-based classroom.

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